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Vol. XLI DECEMBER, 1933 No. 6

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1933

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For December, 1933

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Victor J. Klutho, Architect, St. Louis

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"POOR child, she will have to spend Christmas in the hospital." Naturally we all would rather spend Christmas around our own firesides, if we can. But to spend it in the hospital isn't such a trial, either. In fact for some of our forgotten men and particularly forgotten children the hospital can be a happier place than their homes have ever been. Perhaps the dietitian, as much as anyone else, acts as a dynamo of Christmas cheer. But others play important parts. In this fourth year of the depression more careful planning than ever before is necessary if the hospital is to bring joy to those confined within it on Christmas day. Two articles in this issue (pages 41 and 102) tell how hospitals are observing the Yuletide with limited budgets.

A NEW source of income for those empty beds that have been giving gray hairs to the superintendent! How welcome such a suggestion is. That is exactly what Doctor Chadwick proposes in his article on the tuberculous patient in the general hospital. Doctor Chadwick is the new director of the Department of Public Health of Massachusetts. Payment for service to tuberculous patients in general hospitals would have to come, Doctor Chadwick believes, largely from public funds, as it now does for the patients in tax supported institutions.

THE expert guidance that will characterize the Protestant Hospital Association next year is evidenced in the leading article this month by the president-elect. Mr. Jar-



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rell indicates clearly not only the basic reasons why "rethinking" of hospital problems is necessary but also some of the new thoughts that need a chance to grow.

A SAN FRANCISCO hospital superintendent has nearly turned gray trying to prevent petty theft in his hospital. In his case most of the trouble arises from patients who steal telephone cords, electric fixtures, office supplies and even diapers and safety pins. Unfortunately all petty theft in the hospital cannot be charged to patients. A peculiar philosophy seems to dominate a few employees of any large organization. "Where there is so much, the little I need won't be missed." In the aggregate it is missed, sometimes sorely. Mr. Goodfriend shows some effective ways of meeting this problem in his article on page 47.

"A TWELVE-HOUR day for nurses! Impossible. The patients won't like the constant changing of nurses. They won't feel that they can afford two nurses instead of one. The doctor won't be able to give his orders properly. We've always had our nurses on twenty-four-hour duty. Why should we change?" But change they did until the twelve-hour day became almost universal. Now it is the eight-hour day for special nurses. It seems to be winning the support of doctors, patients, nurses and superintendents. In her article on page 59, Miss Geister tells why. She also very sensibly warns that the eight-hour day is no panacea for all of the economic problems of nursing. But it is a step in the right direction.

THE challenging little article by Doctor List on page 67 raises a controversial issue. The MODERN HOSPITAL will welcome comment.

BEGINNING in January, The MODERN HOSPITAL will expand and greatly strengthen its department of maintenance, operation and equipment. John C. Dinsmore, su-

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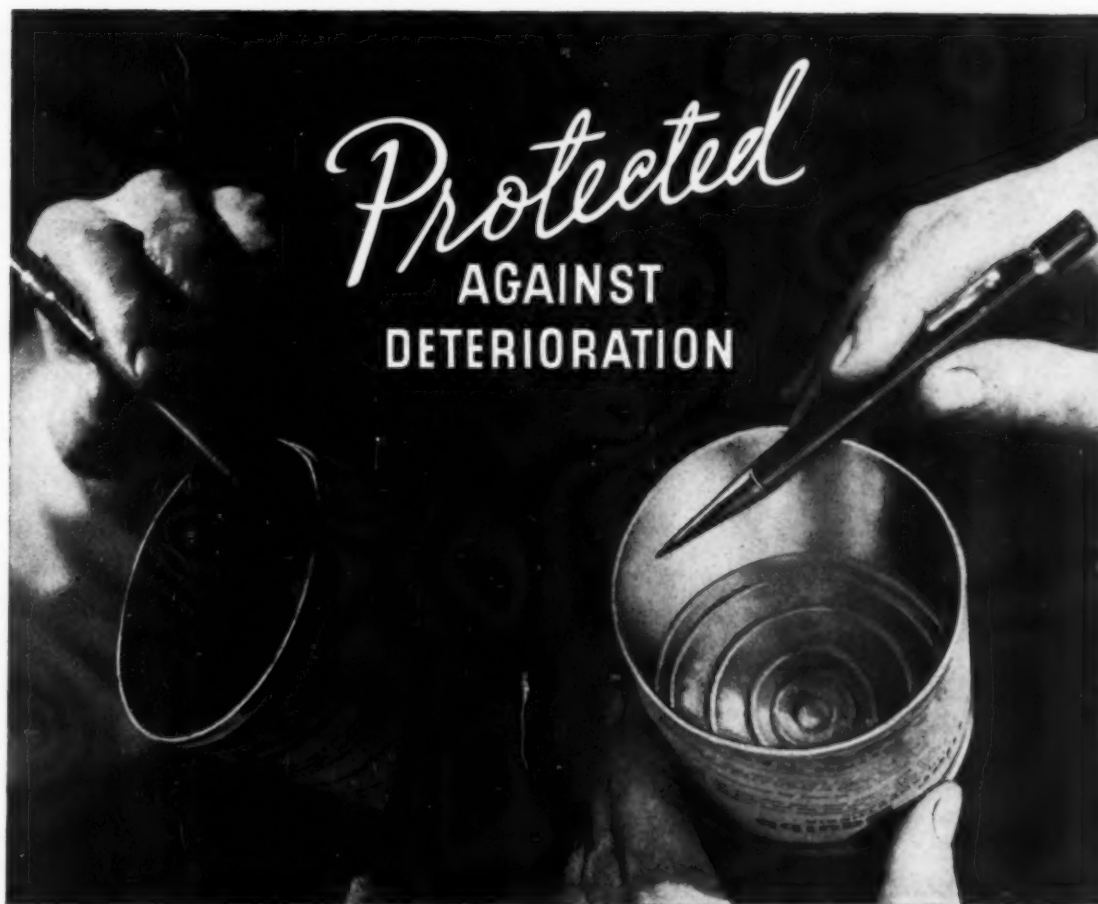
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perintendent, University of Chicago Clinics, and Dr. R. C. Buerki, superintendent, State of Wisconsin General Hospital, Madison, have agreed to take the joint editorship of this department. Through it they are going to make available to the hospital field the results of extensive first-hand investigations of dozens of practical and troublesome questions that face nearly every hospital superintendent. At the University of Chicago Clinics are five associates in hospital administration who devote practically all their time to discovering the best and least expensive methods of conducting hospital work. This service will be particularly valuable to smaller hospitals, who cannot make extensive tests before buying.

FLASHES FROM THIS ISSUE:

"By telephone the department personnel should make a pleasant impression on the public, and by the public is meant physicians, prospective patients, friends of patients and anyone having business with the hospital." Page 51.

"Probably every superintendent has learned to turn off an electric light that is needlessly burning, but how many superintendents turn down a radiator in an unoccupied room?" Page 95.

"If it were practical to mark conspicuously all hospital property with the name of the institution, a great deal of theft could be avoided." Page 49.

"It is a tribute to hospital workers that long as their hours may be, exhausting as their labors unquestionably are, they are always ready to enter into the spirit of Christmas despite the fact that its attendant activities bring a further load upon shoulders already overburdened." Page 41.

"Nurses base their plea for an eight-hour day on the premise that an over-long day for the nurse is inimical to patient as well as to nurse." Page 59.

"The practice of questioning strangers who have no business in the hospital should be encouraged among employees." Page 49.

THE MODERN HOSPITAL

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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Construction, Equipment, Administration and Maintenance of Hospitals and Sanatoriums

VOL. XLI

December, 1933

NUMBER 6

Hospitals Must Keep Pace With Changing Times

By REV. CHARLES C. JARRELL

General Secretary, General Hospital Board, Methodist Episcopal Church, South, Atlanta, Ga.

THE hospital is not likely to remain static in these fluid times. Science commits suicide when it adopts a creed, and the care of the sick cannot live in boxed categories. The hospital has always been responsive to the evolutionary needs of the sick and sensitive to the trends of society. It must continue to render this type of service.

When the medieval poorhouse for the sick began to become a house of healing; when the hotbed of disease, described by Tenon, in Garrison's "History of Medicine," began to become the modern hospital; when the chamber of horrors became the modern operating room, where sleep and asepsis guard the table of the surgeon; when the shadows in a Crookes' tube pointed roentgen toward the discriminating diagnosis of the x-ray plate, then and there somebody was rethinking hospital practice.

Among the factors necessitating such rethinking are first, the processes of civilization, such as the housing and habits of men, the growth of cities, wars, epidemics and natural disasters, all taking their toll of human health and teaching their lessons of surgery, sanitation, the prevention of disease and the promotion of hygiene.

Rethinking is made necessary by the discoveries of science. The "good old days" have little charm for the apostles of health and healing. They were largely days of dirt, disease, ignorance and, at times, pestilence. Hospital mortality was expected to be 20 per cent and recovery from a surgical operation was rarely expected. Hospitals remained notorious for uncleanness and danger to life well into the nineteenth century. Florence Nightingale, it might be said, "mopped up" on the hospitals of the world, and Lister showed the surgeons of all the ages how to wash their hands.

Florence Nightingale's Influence

Another factor is religious conviction. Pastor Fliedner's pioneering piety and Florence Nightingale's genius and zeal made the nurse a different being, thus making the hospital a different institution. They found the nurse "scolded by matrons, sworn at by surgeons, abused by patients, insulted if old, treated flippantly if middle-aged, seduced if young and good looking." When Florence Nightingale died she left the nurse taught by scholars, admired by students, loved by patients, honored by society and sometimes married by doctors.

Again, the hospital must always be sensitive to the social, historical and economic trends of the times. The United States is passing through a profound and significant change. Up to recent years this country had a westward moving frontier. The pioneer was always in the center of the picture and rugged individualism was the theme of the play. This is no longer true. From now on people must work together, play together and succeed together, or workless men will stare at their playless children and a defeated society will sink to despair. People have seen enough of this in recent years to sense how near they came to this doom. Collective endeavor is calling people to the new ideas, new methods and new conceptions of social responsibility.

Why Rethinking Is Necessary

The march of civilization, the discoveries of science, the urge of religious conviction and the pressure of economic conditions force us to rethink the problem and practice of the hospital.

Wherein do conditions demand that hospital executives rethink hospital practice?

This is necessary, first, because of the imperfectly coordinated use of agents and agencies in the light of present day science, such agents as the doctor, the nurse and the hospital; such agencies as the x-ray, the laboratories, the therapies, the dietary, the drug room and the operating room.

The American public has invested one and a quarter billion dollars in large medical centers and in thousands of smaller voluntary hospitals. How to make this vast socially given and socially owned investment scientifically useful involves professional and administrative efficiency within each hospital, the adjustment of each institution to the varied social and economic groups which make up the community, the coordination of the services of hospitals with one another and with other medical activities and some adequate source of support.

Perhaps Health Service Needs a Coordinator

The present imperfect distribution of hospitals is another thing that makes rethinking necessary. Study of a hospital map showing the preponderance of hospitals in urban centers compared with rural sections makes one wonder whether these institutions were really erected by scientific persons. Every hospital study that has been made in large cities, such as Cleveland, New York, San Francisco, Detroit, Chicago, Philadelphia and Cincinnati, has revealed casualness in hospital development.

The Committee on the Costs of Medical Care reported an extremely uneven distribution of doc-

tors, dentists and hospital beds. New York State, for example, showed one physician to 621 persons, while South Carolina showed one physician to 1,431 persons, with similar ratios prevailing with respect to dentists and to hospital beds. Sickness costs the nation ten billion dollars a year, according to the committee, and over three and one-half billion dollars are spent annually for various sorts of medical care. Therefore, a wiser use and more scientific distribution of these agencies seem to be indicated. Perhaps the hospital world needs a coordinator.

Nobody seems to be responsible for the physical health of the nation—not the state, industry, the medical profession or the hospitals. There are gaps and displacements everywhere in the health service.

The nation's resources of medical knowledge, doctors, nurses, hospital administrators and public health agencies are sufficient, if properly organized, to provide adequate health care for all persons. Yet even in times of prosperity such an ideal state of affairs was not approached and now it is still farther away. Forsaken by science, the people turn to quackery and patent medicines and spend for those items alone more than they pay in physicians' fees. One-tenth of the sum paid for medical care goes for patent medicines, according to the report of the Committee on the Costs of Medical Care.

There Is Much to Be Safeguarded

A health-first system cannot be created by the physician alone, or by the hospital alone, or by the philanthropist alone. It cannot be created even by the state—at least not from the scraps that fall from the table of private profits.

Perhaps the hornets of depression will drive out the two Amorite kings of greed and waste, and society will learn to care for the health of its children. No indictment of a soulless competitive system could be so bitter or so terrible as this: In the noontime splendor of medical science the people perish for lack of medical knowledge.

What must be safeguarded in this rethinking process?

First, the scientific and ethical character of hospital care must be safeguarded. The hospital must not be allowed to slide back into the depths from which it was raised by Florence Nightingale, Lister, Billings, Welch and others. Neither must it be turned over to those who would profiteer in pain. The heritage of Hippocrates must not be lost. The beginning of the science of healing must forever date from the day when he gave to the art of healing its scientific character and its ethical ideal.

A profession that still is able to give to the world men like Jenner, Pasteur, Lister and Osler, a profession that is continually seeking the cure for some disease, is not far removed from original Hippocratic righteousness and has not fallen from the grace of ethical ideals.

It is imperative to safeguard the social character of hospital care against those who seek private profit. The hospital is not a department store, a manufacturing plant, a utility, or an industry. It is an institution of mercy, a ministry, a social service. It is the flowering of the religion of Jesus in which the blossoms are the lives of men like Jenner, Pasteur, Lister and Reed, in which the fragrance is the aroma of lives like Nightingale, Clara Barton and the nursing Sisters and in which the leaves are for the healing of the nations of the world.

Human Reconstruction Is the Hospital's Real Task

This does not mean that the hospital is strictly speaking a charitable institution. It is the fault of the present social maladjustment that the hospital is often forced to assume this rôle.

The idea must be kept alive that human reconstruction is the hospital's task. The whole man is sick and the whole man must get well. This means that the body, the mind and the spirit of a patient must be put together again. To accomplish this perfect result, complete coordination is necessary between the administrator, the nurses, the laboratory technician, the dietitian and the doctor and his consultants.

Disease prevention and health conservation belong particularly to the hospital. Hospital workers must be evangelists spreading the gospel of healing. This is a task of missionary import. Society must learn how to implement its preventive medicine. Here is work for the hospital. The hospital must not be merely a hotel for the sick or a poorhouse for the infirm and destitute. It must be the workshop of the physician and the center of preventive medicine.

Some Type of Group Medicine Is Coming

Where does the task begin? "The ministry of healing inheres," says Bishop Warren A. Candler, Methodist Episcopal Church, South, "as an essential part, in the commission given by our Lord Jesus Christ to His followers. It is a perpetual obligation which He imposed upon His church to be faithfully and tenderly discharged by it so long as there are on the earth suffering to be soothed and disease to be cured."

The hospital must learn to extend its services to the pay patient who does not need to go to bed, but who desires the benefit of hospital diag-

nosis and health examination. This will increasingly cause doctors to locate their offices in the hospital.

The hospital must rethink its social responsibility. The hospital of the future is certain to be closely associated with the medicine, the nursing and the social forms of the future. If medicine adopts a system of great medical centers, the hospital will be in its midst. If medicine adopts group service and periodic payments the hospital will be needed by the doctor, the nurse and the patient. The hospital will be needed then as it is now to keep the doctor up-to-date, and to enable the medical profession to subject the doctor to stimulating professional environment, which helps him do better work and saves him from becoming careless and superficial. The United States is moving toward some type of group medicine, and a way must be found to preserve the fundamentals of the ethical relations of personal medicine. In the new society the emphasis will not be on the hospital with beds to sell, or on the doctor with skill to sell, but on society with persons to save.

The hospital must rethink its sources of support. Endowments will be relied on, of course, for the teaching hospitals and for the great medical centers. But endowments cannot be relied on to finance hospital care in the ordinary voluntary hospital. Hospital endowments amounted to \$437,000,000 in 1928. Endowment funds have not been an important factor in financing hospital service in the United States in the past. It is not likely that they will be in the future.

Other Sources of Income Will Be Needed

Taxes are being relied on to an increasing extent for supplying hospital care and many persons predict that the tax supported hospital will pre-empt the field. But this will hardly come to pass until the nation's theory of government and its conception of taxation are changed.

Hospitals will continue to rely on patients, fees and donations, but these sources of income will have to be supplemented by some plan of periodic payment by groups insuring themselves for hospital care.

Group hospitalization is now being tried in twenty American towns and cities and in sixty participating hospitals. It has passed the experimental stage; it has met the endorsement of the American Hospital Association through its council on community relations and bids fair to receive the prevailing endorsement of the medical profession.¹

¹Read at the convention of the American Protestant Hospital Association, Milwaukee.

What Others Are Doing

Hospital Finds a Market for "Waste" Items

Dr. Donald C. Smelzer, director, Graduate Hospital of the University of Pennsylvania, Philadelphia, has discovered numerous methods of using or disposing profitably of items usually discarded as waste.

For example, wooden boxes and crates can be carefully taken apart and the lumber saved for shelves and other occasional uses by the carpenter or engineer. Steel drums that are not returnable for credit make excellent trash containers or ash cans if the head is cut out and "milk can" handles are bolted on.

Wet garbage can be sold on a yearly contract basis to hog raisers. It is sometimes advisable to write into the contract that the buyer shall supply the cans and wash them daily. The hospital must supply convenient and sanitary garbage storage space, equipped with hot and cold water.

Discarded x-ray films can be sold to concerns that reclaim the silver. Several companies purchase x-ray films and supply special containers in which to ship them. The same concerns will also buy the used hypo solution and will supply containers.

Wooden barrels and baled waste paper can also be sold, especially if the hospital has adequate storage space to store up a large load of these items. Buyers of small quantities are sometimes hard to get. Bones, fat and meat refuse can be sold to manufacturers of fertilizer and soap.

Proper Handling Reduces Cost of Mops and Brushes

A method whereby hospital mops and brushes are exchanged on a fixed day each week is recommended by Capt. H. H. Warfield, superintendent, St. John's Riverside Hospital, Yonkers, N. Y. Captain Warfield has found that such a method prevents losses and effects substantial economies.

Each porter is supplied with two or more mops. On a fixed day each week he exchanges these mops for new or clean ones. Each used mop is tied with two strings and the whole batch is placed in a laundry wash wheel where they are thoroughly cleaned. They are then properly placed in the extractor so as not to become tangled. Then they are laid out on a board or rack to dry

and are ready to be reissued the following week. Those too badly worn to be useful are passed on to the engineering department where they are used to good advantage in place of cotton waste. This method of handling mops results in a substantial saving as well as in a cleaner hospital.

Floor brushes are handled in a similar way. A good quality is bought because such brushes give good wear. When not in use, they are hung up instead of left standing on the bristles. They are exchanged regularly for others. The old ones are kept until a reasonable number accumulates, when they are washed, cleaned, combed and dried so that bristles are straight. Uneven bristles are trimmed off if necessary. The brushes are then turned over to the painter who is instructed to paint the backs a nice bright red or some other color. They are then put back in use in exchange for other brushes and give about as much service after they have been renovated as they did before.

Patients Receive Morning Paper With Compliments of Local Dry Goods Company

Local morning newspapers are supplied free of charge to all patients at St. Luke's Hospital, New Bedford, Mass., according to Scott Whitcher, superintendent. Each paper carries a sticker bearing the following legend:

Compliments of
STAR STORE

With Our Daily Best Wishes for Your
Quick Return to Good Health

This service has been generously given for several years by the New Bedford Dry Goods Company. While it might not be possible to get one firm to do as much in every community, hospital executives could easily, through Rotary, Kiwanis and similar clubs, persuade firms to supply papers for monthly periods and in this way a continuous service could be supplied.

Nurses' Association Evolves Plan to Help Unemployed Members

The Regina branch of the Saskatchewan Registered Nurses Association, reports S. T. Martin, superintendent, Regina General Hospital, has created a fund to assist its unemployed members. Free nursing service is supplied to seriously ill indigent or ward patients who otherwise could not avail themselves of the services of a special nurse.

This service is placed at the disposal of the two hospitals in Regina. The nurse is paid by the association at the rate of \$4 per day for seven-day periods. The work is rotated among all unemployed nurses of the association who want it. Funds were raised in part by holding teas, bazaars, dances and other functions, and a balance of fees which had accumulated over a period of years was also used.

Personal Follow-Up Service Makes Friends for Hospital

G. M. Hanner, superintendent, Beth-El General Hospital, Colorado Springs, Colo., recommends a plan in use in that hospital for following up patients dismissed from the institution.

"We endeavor to follow up every patient soon after his dismissal," Mr. Hanner writes. "A letter is written to the patient who resides outside of Colorado Springs. This letter inquires as to the trip home, the patient's present condition and the condition of the baby, if it was an obstetrical case. A personal visit is made to each patient living in Colorado Springs.

"Formerly one of our senior nurses made these visits but now an assistant superintendent of nurses does it. She takes the car two or three days a week and goes to the home of the former patient, has a visit with him, inquires about his health and tries to get his impression of the hospital, its nurses, its food service and other features."

Mr. Hanner has found that valuable contacts are made in this way. Neighbors are soon told about the visit of the nurse and they form a favorable opinion of the Beth-El Hospital. Sometimes the nurse is able to give help to the mother of a tiny baby and on several occasions she has advised the mother on the necessity of seeing her doctor.

Probably you can think of one or more practical ways to save time or increase efficiency. The Modern Hospital will welcome your ideas to put before other hospitals

Each hospital, large or small, has its own Christmas story. This year because of reduced earnings and a substantial shrinkage in contributions, the tale may be simpler. But there will be one—always

Nights Before Christmas in Hospital-Land



By RAYMOND P. SLOAN

Associate Editor, *The Modern Hospital*

THE night before Christmas marks the official entrance of Santa Claus into hospital-land, but the spirit of good will and doing for others which he radiates is reflected throughout the institution weeks before his actual arrival.

Hushed expectancy prevails everywhere. In much the same manner as fond parents accept mysterious packages at the back door and secrete them from curious young eyes, so does everybody identified with hospital régime, from the superintendent down to the kitchen maid, engage in numerous private conferences, providing unmistakable evidence that Christmas is in the air. After all, are not the sick that have been entrusted to their care their children?

It is a tribute to hospital workers that long as their hours may be, exhausting as their labors unquestionably are, they are always ready to enter

into the spirit of Christmas despite the fact that its attendant activities bring a further load upon shoulders already overburdened. Christmas must be observed to the fullest that time and impoverished budgets will permit. Consequently, those lights burning so late these nights in the great, grim structures in city centers, as well as in smaller institutions in remote rural sections, do not always mean vigilance against death.

Look into one of those rooms and likely as not you will find a dietitian and her helpers skillfully concocting out of apparently nothing at all gay little Christmas baskets to adorn the holiday trays. Open another door, this time in the nurses' home, and a group of girls will rise in confusion caught in the act of talking over cases—not cases as they are usually known in hospital life but specific instances of children in the wards faced with the

prospect of spending Christmas in bed and without friends or relatives who can enact for them the rôle of Santa Claus. If by chance you encounter several giggling youngsters slipping into the nurses' home late for study hours, think twice before ascribing it to a probationer's escapade. Voluminous bundles will tell the story of an excursion to the "five-and-ten" in search of a surprise for those whose only surprises of late have been unpleasant realities including pain and anxiety.

Steadily plans progress until more tangible evidence of what is happening appears. The faint fragrance of balsam and fir heralds the advent of Christmas cheer, routing for the moment the familiar odors of penetrating disinfectants. An air of gayety prevails, producing new lights in faded eyes and the flush of color in pale cheeks. Christmas Day spent in the hospital is not going to be so bad after all.

There's Mystery in the Hospital Air

The twilight of Christmas Eve falls in the nursery and children's ward. Rows of little heads are finally quiet, only an occasional restless turn revealing physical discomfort. Noiselessly, doctors, nurses, orderlies, clear one end of the room. A Christmas tree is soon erected, its green fragrant branches made brilliant with glittering tinsel and bright ornaments. From some mysterious region are produced armfuls of packages—flaxen-haired dolls, toy airplanes, tops that swirl and balls that may even bear the endorsement of Babe Ruth himself. Glances now and then at the little patients bring to mind the comment of one youngster who that very afternoon whispered to his nurse, "Is there really going to be a Santa in this hospital? If there is, it will be the first time he has ever come where I was."

The remnants of supertime disappear as if by magic in the lower regions of the hospital where the dietitian and her staff reign supreme. There is much work to be done before midnight. Great fat turkeys are brought forth from the ice boxes and prepared for cooking. All the fixings are there, too—cranberries and turnips—and it wouldn't prove a shock even to see a huge mince pie produced triumphantly as if from a magician's hat. In one corner the trays are being arranged with paper mats bearing a Merry Christmas greeting and with napkins in a bright holly design. A quaint little Christmas card bears the name of the patient. Perhaps just a whiff of cooking pumpkin has reached the men's ward upstairs and prompted the comment of one patient to the man next to him, "Say, partner, cheer up, tomorrow's Christmas. They tell me they feed you swell here."

Over in the nurses' home several girls are hang-

ing up wreaths at the windows and decorating the main stairway with garlands of Christmas green. "I dreaded being away from home for Christmas," one probationer may be heard remarking, "but it's a lot of fun after all, and I just can't wait to see the faces of those kiddies tomorrow morning."

The success of Christmas time in the hospital depends upon many things. It depends, for example, upon the attitude of the chief executive toward the proceedings. Despite his sympathy with holiday activities, he must of necessity safeguard the routine and protect the patients from too much confusion or excitement. In one large city hospital it has been the custom for many years to clear out one of the children's wards for the festivities since this was the only space available. Many times children who were seriously ill had to be removed to another ward. It was decided, therefore, that even if it meant simplifying the Christmas party considerably, it was better to do so than to endanger the patients' health. Accordingly, much of the entertainment was curtailed last year.

While it may be his strong inclination to encourage a certain amount of celebration among the employees and the staff, the superintendent here, too, must assume a conservative attitude. Anything that tends to reduce the efficiency of the hospital service or to detract the employees' attention from their duties must obviously be frowned upon.

Much Can Be Accomplished at Little Cost

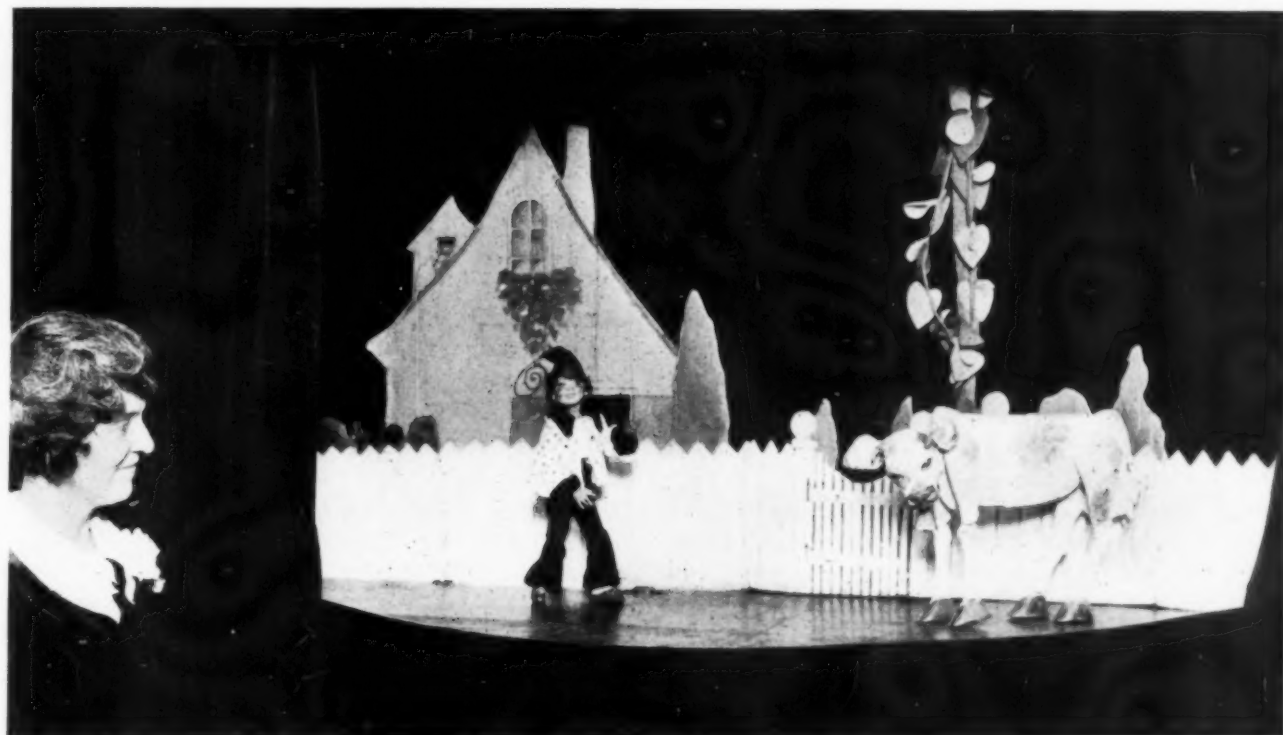
A large measure of the success of the Christmas activities depends, too, upon the interest of the board of directors, the junior auxiliary and the public at large. A study of the situation in many hospitals reveals that it is easier to secure outside donations for the Christmas fund than for any other purpose. There is something about the idea of making the holiday season a happy one for the less fortunate that loosens the purse strings as nothing else will do. The children's wards are the recipients of all kinds of gifts in the form of toys. "They are not hand-me-downs, either," as one superintendent explained. "Some years we have so many that they are laid aside for distribution on other occasions." In some institutions it has been the custom in past years for each member of the board to contribute toward a fund which makes possible small gifts for the men and women on the staff in the form of cigars and handkerchiefs. Due to depressed business conditions, however, this practice has been largely discontinued.

There is a third factor in measuring the success of the Christmas entertainment and that is the staff itself and the extent to which it enters into the spirit of the occasion. If the institution is fortunate enough to have an organization that is

sufficiently self-sacrificing and interested in its work to contribute generously of its time and effort, much can be accomplished with little material layout. Fortunately, the very nature of hospital service is such as to attract workers possessed with this spirit, with the result that the finest contributions being made to hospital funds throughout the country are those subscribed to by the men and women actually in the field. This is why we find many an intern or doctor on the medical staff cheerfully donning the guise of Santa Claus. There is a requisite for playing the rôle in one institution, at least. This is that

advantages in subscriptions accruing from the various church units throughout the community which assure it some support at least. This same religious aspect bears, too, upon the nature of the Christmas ceremonies, thus making it possible to introduce into them a religious flavor that otherwise could not be achieved.

Other hospitals, while not identified with any particular religious faith, are nevertheless in close contact with the churches through guilds and fraternal organizations. The guild which is an auxiliary unit of one hospital in a small town in New York State allocates its various wards



the applicant be the right size to fit the garment, which has been stage property for many years.

The nature of the Christmas plan depends upon the character of the hospital, its location and the people to whom it caters. Naturally, the big city institution has resources on which it can draw which would be outside the scope of the small, rural hospital. On the other hand, the very fact that it is located in the country gives the small unit innumerable opportunities for providing a genuine Christmas atmosphere for its inmates at a cost that is comparatively small.

The hospital with church affiliations has certain

Always the hit of the Christmas celebration at Beekman Street Hospital, New York City—Sue Hastings's marionettes, which bring the afternoon program to a delightful close. The marionettes are enjoyed by the grown-ups just as much as they are by the little patients.

to several churches in the community and each of these churches decorates the wards at Christmas time. It also arranges a special song service on Christmas Eve with some of the local church choirs.

It is interesting to find out precisely what the various types

of hospitals do in the way of Christmas entertainment. Take, for example, one typical small country hospital with a capacity of seventy beds. To use the superintendent's own words:

"On the outside over the entrance there is a large tree lighted with colored electric bulbs; below is a large wreath lighted in the same manner which



produces a pretty effect as seen from the road, as the hospital stands back about 400 feet. The vestibule and entrance hall are decorated with evergreens festooned from the center light and a large wreath of evergreen, tied with red ribbons, hangs on the front door. This gives a Yuletide appearance, and the visitors who enter carry to the patient the Christmas spirit we aim to achieve. All the windows throughout the hospital have wreaths inside, tied with sprays of holly and red ribbon, and a Christmas tree is placed in the children's ward. All children are given a Christmas stocking and toys which are generally provided by our social service department.

A Personal Greeting for Each Patient

"Each ward patient's tray has a Christmas card with the patient's name written on it, Christmas favors and a little red basket containing candy and nuts. On each tray Christmas doilies with napkins to match are used. Private patients' trays are decorated in a similar manner.

"The staff and nurses' dining rooms are decorated attractively with candles, large floral pieces for the side tables, Christmas cards and favors for everyone, and baskets of candy and nuts. The candlesticks are all tied with holly and red ribbon and the tables are set with Christmas paper table covers and napkins to match. Our domestic staff has its table decorated with a floral Christmas centerpiece and candles. They also receive favors, little baskets of candy and Christmas cards.

"The nurses' home has a beautifully decorated and lighted tree in the living room and the various

the midnight church service. Light refreshments are served.

"Friends of the hospital contribute to the superintendent's Christmas fund for purchasing the decorations, and we find many persons most anxious to give to this fund. The Rotary Club usually donates the Christmas dinner. The ice cream is usually supplied by a local drug store and our trustees send candy to the entire personnel.

"During the time the dinner is served the superintendent makes a visit to every patient and wishes him a merry Christmas. At the end of the day we are tired but happy in having done our share toward making the day more cheerful and pleasant for those less fortunate in health than ourselves."

Plans Take Shape Weeks Before Christmas

Second, for purposes of illustration, let us take a hospital with a church affiliation—a 225-bed hospital in a large Eastern city. This hospital is noted for its friendly atmosphere due in large measure to the care exercised in selecting the personnel. Girls entering the training school are recommended by pastors of churches in different sections of the country. Hence they come from modest but good homes. The result is a family spirit that contributes whole-heartedly to the Christmas plans.

Weeks before Christmas actually arrives arrangements for the festivities are started. Contributions come in from the various churches and whereas they have been materially reduced of late years, it is still possible to decorate the main hallway, present the children with toys and add numerous attractive touches to the Christmas trays.

members of the medical staff send fruit, candy and nuts which are placed on a large side table. They also send candy for the maids and cigarettes and cigars for the men. Wreaths are placed in all the windows of the nurses' home and a large evergreen wreath tied with red ribbon is placed on the outside door. A generous bunch of mistletoe hung in the doorway of the living room provides much merriment. Candles are used for lighting. The nurses usually have their presents around the tree and open them before the fireplace upon their return from

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Private patients are permitted to have two guests for Christmas dinner.

Soon after the patients in the children's wards have been looked after for the night, the work of erecting and trimming the Christmas tree begins. Christmas morning brings shouts of merriment over the toys that are distributed. As the superin-

tendent explains, "It means that many of the children have a far better Christmas in the hospital than they do at home."

The big feature of the celebration in this hospital, however, is the Christmas morning service which starts in the chapel at ten minutes before seven. All the nurses and certain members of the

Many notables graced this celebration at Beekman Street Hospital. The gentleman seated needs no introduction. In back of President Roosevelt from left to right are Dr. Carl Smith, Julia Berwind, president, social service committee, Howard S. Cullman, president of the hospital, Clarence Chamberlin, well-known aviator, Governor Herbert H. Lehman and Marshall Field, director. The picture at the top suggests that Santa remembered only the girls, but elsewhere was an abundance of gifts for boys.



staff form a procession that passes through the various buildings and concludes in the chapel. Patients are invited to follow the order of the service in their thoughts, aided by a printed program which is distributed to everyone. When the procession reaches their corridor they are enabled to join in singing the hymns and in the responsive reading and prayers.

As a third and last example of what the hospital may do for Christmas, a typical unit in a large city comes to mind, possessing a board of directors comprising men prominent in the business and professional worlds. Here the Christmas celebration assumes more important proportions, constituting a real party staged three or four days before Christmas so that people of note may attend. This hospital has had on different occasions such illustrious visitors as President Roosevelt, Governor Lehman of New York State, Clarence Chamberlin, well-known aviator, and prominent opera singers.

Not only children confined in the hospital are entertained, but the party includes as well those who have received treatment in the clinical departments and others from the neighborhood whose names are on the lists of the social service department. All manner of toys and cornucopias of candy are distributed and the program closes with a delightful marionette show which invariably proves the biggest hit of the afternoon celebration.

There is constant hustle and bustle in a hospital of this type which responds largely to accident cases. Two ambulances dart back and forth through the narrow streets and into gloomy loft buildings to return with unfortunate victims of all kinds of catastrophes.

Despite this constant activity there is always time for Christmas. Just as much time, in fact, as the curtailed budget will permit. Generosity of the directors in past years made possible small gifts to the employees involving happy shopping excursions and long evenings spent in the superintendent's office wrapping and labeling. Some of these expenditures have of necessity been eliminated, but much attention is given to other Christmas activities. Patients' trays are attractively decorated and whereas the number of private patient rooms is somewhat limited, everyone occupying such accommodations receives among other things a miniature Christmas tree.

Happy times in hospital-land—these weeks before Christmas—happy because they mean unselfish effort in contributing to the enjoyment of others. Happiest of all, however, is that hour when the last candle burns low on the Christmas tree, when quiet reigns in the wards and one last glance into the children's ward reveals a little child fast asleep hugging tight in her arms a flaxen-haired doll. What matter then what the effort has been?

A Strange Episode in the Life of a Hospital Administrator

By JOHN E. RANSOM

Assistant Director, Johns Hopkins Hospital, Baltimore

My secretary announced that a Mr. Weinstein wished to see me and shortly thereafter ushered into my office a fairly prosperous man of evident Semitic lineage. He introduced himself and began to relate his story.

"Twenty-five years ago," he said, "my wife and I arrived in this city. We were poor, unenlightened immigrants. About a year later we had our first baby—a girl. Before her confinement my wife visited your out-patient clinic, and when the baby came, your doctors and nurses cared for the mother and baby in our home."

At this point I began to wonder if something had gone wrong with one or the other of the patients and if the husband and father would next ask to have his money back. But Mr. Weinstein continued:

"The baby grew up, is married and now has three children. A few evenings ago we had a birthday dinner for her, and in some way it occurred to me that it would be a decent thing for me to come over to see you, find out if I could what it had cost you to render the service you gave us twenty-five years ago, and pay you. I am not a wealthy man, but I am able now to pay for services that were afforded my family at a time when we sorely needed help."

After I had recovered from the shock I told him that I

did not know the cost offhand, but that I would look the matter up and write him. He said this was satisfactory, gave me his business card and bade me "good day." Investigation showed that out-patient obstetric cases cost us about twenty-five dollars each. I wrote Mr. Weinstein to that effect and by return mail received his check in that amount, a courteous note and a photograph of his daughter and her family.

I look back on this episode as a pleasant interlude in the day's work, not often lightened by occurrences of this nature. It gives me satisfaction also to tell the story to habitual defamers of the members of tribes other than the one to which they belong.

Palmer Hospital's New Policy

The Palmer Memorial Hospital, Boston, recently announced a change in its policy. Henceforth its services, devoted primarily to the diagnosis and treatment of cancer, will be extended to sufferers from this disease regardless of their ability to pay, up to the limit of the hospital's resources.

The hospital does not become a purely charitable institution since it still retains its private floors. But the change of policy and the adjustment of fees put the institution in line with others in Massachusetts which are placing their excellent resources for combating cancer at the disposal of patients who are unable to pay large fees for the treatment of this disease.

How the Hospital Can Guard Against Petty Theft

By JACOB GOODFRIEND

Assistant Director, Montefiore Hospital, New York City

EVERY member of the executive staff of a hospital has had the mortifying experience of discovering that the rest of the world does not always look upon hospital property as a trust to be safeguarded in the interest of the sick.

The various methods for safeguarding movable hospital equipment against theft or destruction play a large part in the problem. The type of clientele served and the effort that is made to teach them and, if they are not teachable, to watch them, is another factor. The interest of the administrative office in safeguarding hospital property is the prime requisite for reducing such loss.

Money, jewelry and other valuables that are carelessly exposed are the articles most often lost. These losses usually concern patients rather than the hospital. Articles taken from the hospital are kitchen utensils, linens, medical and surgical supplies, pharmaceuticals, x-ray films and other property that is easily carried away. The problem seems to grow with the size of the institution because of the difficulty of safeguarding large areas that are served by many exits.

In one large hospital in the East, money and a considerable amount of jewelry had been reported stolen day after day for several weeks in succession in the nurses' home, a common place for petty pilfering. Clues were promptly investigated and a thorough search made but without result. All kinds of traps were set to catch the thief, who proved too elusive. On one occasion, however, a nurse left her wrist watch on the dresser and stepped out of her room. She returned within a few minutes and discovered that the watch was gone.

She promptly notified the main office, wisely staying on the floor to identify anyone who might be around. The rooms on this floor were promptly

searched and only one other person, a student nurse, was found. She was in her room, comfortably in bed and denied any knowledge of the theft. A search of her room revealed the watch in a dresser drawer. On further questioning, she confessed to a number of thefts that had occurred over a period of several weeks. She was examined by a member of the psychiatric staff and found to be a kleptomaniac. She was, of course, promptly discharged to her family in the care of a physician.

Hospitals, as a rule, suffer chiefly from petty thievery. The kleptomaniac, as such, is not a common visitor. Hospital employees, particularly those in the lower wage groups, often do not consider the appropriation of hospital property for their personal use as being an act of dishonesty. There is, in fact, a feeling on the part of the public generally that hospital property is public property and therefore may rightfully be used by them. Thus each employee becomes his own judge as to what he is or is not entitled to from the hospital besides his wages. This is a form of perverted

self-righteousness which requires considerable education to overcome. Hospital employees often regard such trivial items as socks, underwear and gauze (which may be conveniently used as an inexpensive substitute for a handkerchief) as part of their maintenance and often do not attempt to conceal their personal use of these articles.

The sources through which losses of this kind occur are surprising. There is the dispensary physician, serving on a voluntary basis, who feels that alcohol, gauze and often surgical instruments are partial compensation for his services. There is the kitchen employee who cannot resist the temptation to take hospital food home to his family—there always seems to be so much of it around and

Many employees feel they have a right to appropriate for their own use supplies, food and equipment. The theft of money and other valuables is another source of trouble. Montefiore Hospital has devised a number of effective measures for preventing theft

he feels there is little harm in feeding an extra mouth or two that might otherwise suffer deprivation. There is the patient to whom minor equipment is assigned at times and who sends some of it home with his visitors when he has no immediate use for it. There is the visitor who helps himself to hospital linen and silver. The most despicable thief of all is the one who does not hesitate to remove the belongings of a deceased patient. The sentimental and often valuable wedding ring seems to attract the employee who has ghoulish tendencies.

Warning Notice Brought Good Results

Some of the methods of prevention that have been attempted in Montefiore Hospital, New York City, to safeguard against losses of this kind deserve mention. At one time, in order to arouse patients and employees to the menace of the sneak thief, the following notice was posted prominently throughout the hospital and brought good results.

"During the last few weeks an increasing number of complaints have come to this office about petty thefts from the rooms of resident employees of the hospital. In one instance a considerable sum of money was lost by a special nurse during her absence from a private patient's room. While it may be said that there was contributory negligence on the part of the employees involved in exposing money and valuables on the assumption that they were surrounded only by honest people, it is also clear that a petty thief is prowling around the premises using every opportunity that such carelessness can provide.

"I am posting this notice with several objects in view (a) to warn everyone concerned that a thief, who has not yet been apprehended, in spite of our best efforts and the best efforts of the police department, is lurking among them, (b) to request a greater degree of care on the part of resident employees of money or valuables in their possession and (c) to ask everyone to be on the watch for suspicious characters who have no business in the various parts of the hospital and to report their presence at once to this office.

"With the cooperation of the patients and employees of this hospital it ought to be possible to identify the thief and prevent a recurrence of such losses."

When employees are hired it is the practice of the department heads to check their references carefully. This is, of course, a way of preventing mischief at the outset. In several instances the references of an employee were not checked, and it was discovered that he was dishonest.

The second step consists of fingerprinting employees. It has been found that applicants for

positions, with few exceptions, submit to this practice without complaint, and that in the rare instances when objections are raised the applicant has something to conceal. Fingerprinting is commonly employed for purposes of identification; government postal savings institutions fingerprint their depositors, and maternity hospitals fingerprint innocent babies. The practice cannot be objected to on the ground that it brands a person as a criminal, which is the excuse given by the few who do object. In suspicious cases the fingerprints can be submitted to the local police department to find out whether the applicant has a police record.

The hospital's next precaution consists of providing each employee with a typewritten list of his duties, which include the safeguarding of both the hospital's and the patients' property. The employee is specifically warned against accepting any gift in money or in kind from a patient. In various other ways he is reminded that he can expect from the institution his wages, his maintenance and decent treatment, but that he may not help himself to anything else.

Accurate physical inventories should be checked periodically against book inventories and discrepancies should be accounted for immediately by the head of the department. Test inventories between regular inventory periods are taken at Montefiore Hospital from time to time even though no differences are found on the regular monthly checkup. Annual inventories are made of valuable equipment, such as typewriters, microscopes and electric fans, which, when compared with the previous inventories, often reveal the loss of an article before it is too late to recover it. Details concerning equipment, such as the number of a microscope, the initials, the names of manufacturers and other marks of identification, should be carefully recorded. When articles of this kind are pawned, they are more readily identified if an accurate description is available.

Articles Should Bear Name of Hospital

The lock and key is the most common way of protecting property and keeping out the thief, but there are good locks and poor locks. Cheap and unreliable locks are sometimes used to protect valuable property and an adequate lock supplied only after something has been stolen. Paint shops should be locked securely not only to protect property, but also to reduce fire hazard. Matches and cigarette butts discarded carelessly create a particularly serious menace in the open paint shop or x-ray department.

Articles of equipment should be kept where they belong. The careless habit of transferring equipment from one place to another without re-

cording the transfer is counted contributory negligence when these articles are lost.

If it were practicable to mark conspicuously all hospital property with the name of the institution, a great deal of theft could be avoided. Hospital linens should be marked in the center so that the name cannot be cut out without destroying the value of the linen. Silverware should be clearly and prominently marked with the full name of the institution. Medical instruments, microscopes, china, pots and pans and other goods should be prominently and permanently identified with the full name of the hospital. All markings should be well embedded in the material to aid identification and to ensure against their removal.

Movable Property Should Be Fastened

It is often advisable to attach hospital equipment to walls, ceilings and floors. The blood pressure apparatus in the clinic can be of the wall variety where it is safe from easy removal or damage. Typewriters may be securely fastened to desks; bandage scissors and flashlights can, if necessary, be chained to the ward medicine baskets. Electric fans are less noisy when they are securely fastened, and are more difficult to steal. The electric cord of desk lamps can be wired directly to the wall socket. Wire cages to protect electric bulbs have become rather popular in hospitals where safety comes before appearance.

Face towels have a strange way of disappearing. A cabinet that allows the free use of such towels but in which they are securely fastened, often results in a saving. It does not, however, prevent their use as shoe cloths or pen wipers. Telephone instruments that operate independently of the hospital switchboard can be locked during off hours.

The use of clear glass in storeroom doors and a small night light in the room gives the night watchman an opportunity to observe if anything unusual is happening in these locations. Store-rooms on ground floors or with windows that open on a fire escape should be supplied with window guards. Insurance against burglary in such rooms is often advisable. A burglar alarm bell leading to the alcohol vault in the pharmacy is a rather inexpensive investment. A safe or some other form of strong box should be supplied for the storage of narcotics and other expensive drugs.

The practice of questioning strangers who have no business in the hospital should be encouraged among employees. I recall an instance where a nurse in uniform, formerly connected with the institution, made the rounds of the wards and "borrowed" narcotics for a patient in one of the other wards. One of the charge nurses, realizing that this procedure was contrary to the accepted

practice of the institution, notified the department of nursing and a thorough search was immediately made for the culprit. She had, however, escaped.

Keys to ward medicine cabinets are usually too loosely handled. They are often left in the drawer of a nurse's desk or on a hook in the nurses' office, which at times is left unguarded. The charge nurse should always have the keys in her possession when they are not in use by her assistants.

The master key problem prevails when access can be had to such keys without difficulty. Complete control is imperative. Whenever it becomes necessary to use a master key during the night, a record should be kept of the name of the person using the key, the room entered and the purpose for which the key was used. These keys should be checked and counted by a responsible person every morning so that losses can be discovered at the earliest possible moment.

The charge to employees for the replacement of lost hospital keys should never be less than \$1 each. It has been the experience of Montefiore Hospital that losses have materially diminished since the charge was increased from \$0.25 to \$1 a key. Keys that are used frequently by many employees, as for example those to the tennis courts, ambulance gate and mortuary, should be kept in a central location. They should be marked and attached to a heavy piece of wood or metal so as to discourage persons from leaving the keys in their pockets. This practice is commonly used in the better hotels. It is recommended that an inspection be made of the keys in the possession of employees at irregular intervals for the purpose of detecting skeleton or master keys in the possession of persons who are not supposed to have them.

New Employees Required to Sign Agreement

It is strongly recommended that all packages be examined at the exits of the hospital. Few persons object to an inspection of their property when they leave the building. This practice is in vogue in many commercial establishments, but some hospitals still have enough faith in human nature to be willing to take an occasional loss in order to avoid the distasteful method of inspection. Examination can be waived in the case of an employee for whose package the head of the department will vouch in writing on a special form prepared for the purpose. This "pass" should be collected at the exit, initialed by the person who collects it and examined by the office of the administration daily. The pass is helpful in tracing instances that are in doubt.

In order to keep strangers out of the buildings, employees should be ready to show the identification cards that are supplied them at the time of

employment. Montefiore Hospital makes a charge of \$0.50 for replacing a lost card or when the card is not turned in when the employee leaves the hospital's employ. These cards serve many other useful purposes. They identify the employee in the dining room, at the bank and in the linen room when a change of uniform is supplied.

New employees are required to sign the following agreement printed on the back of the employment card:

"I hereby agree as a condition of my employment by Hospital to work by the day at the monthly rate named on the reverse side; that this agreement may be terminated at any time during any month by either party without previous notice; to permit the hospital to search my person, room and its effects, hereby waiving all claims for damage on account of such examination. I consent also to a deduction for careless destruction of hospital property. I further agree in the event of leaving of my own accord to be paid on the regular pay day."

The above form is common in hotels and, although not absolutely binding, has the approval of legal authorities.

The loss of items, such as rubber goods, syringes and enamelware, can be more readily controlled if they are issued only on an exchange basis. This system gives the storekeeper an opportunity to inspect damaged articles before they are discarded, thereby preventing carelessness or malicious waste. Occasionally articles are discarded that could be reclaimed at slight cost. The exchange system prevents this. It has been found advisable to charge employees for thermometers and other

articles damaged or broken through carelessness, as it is generally acknowledged that employees take better care of their personal property than they do of the property of their employer.

One of the most serious phases of the theft problem in hospitals is the matter of dealing with offenders when they are apprehended. There is a general tendency in hospitals to deal leniently with the culprits. Any leniency required by the circumstances should be left to the courts, where a record is kept of the case. It is unfair for one hospital, through misdirected sympathy, to allow a malefactor to go unpunished only to repeat the offense in another institution.

The acceptance of bribes from private ambulance owners, blood donors and funeral directors is a common practice in some hospitals. The Metropolitan Funeral Directors Association of New York City and the Private Ambulance Owners Association have condemned this pernicious practice and have formally requested the hospitals to cooperate in order that it may be eradicated. The acceptance of a gift in money or in kind from a patient or his family not only is wrong but is positively demoralizing to a hospital employee. It creates distinctions from the point of view of service to those who can afford the bribe.

An administrator or department head should never withhold the truth about a former employee when his testimony is sought by another hospital. To do so constitutes contributory negligence if the offender repeats his dishonest career in another institution. This should be self-evident to every fair-minded administrator, although current practice does not indicate that it is.

Legal Regulations Governing "Contract Practice"

Due to the fact that "contract practice" has long been in effect in the lumbering and other isolated industries of the Western states, some of these states have legal regulations governing such practice. These regulations, it is held, might apply also to group hospitalization plans.

In Oregon the laws governing hospital associations define such associations as "any corporation, association, society, firm, partnership, or individual contracting or agreeing . . . with individuals, families, employees, associations, societies, or with employers for the benefit of employees for the supplying of medicine, medical or surgical treatment, nursing, hospital service, ambulance service, dental service, burial service, or any or all of the above enumerated services," except lodges and mutual benefit associations which do not employ paid solicitors.

All hospital associations in Oregon are required to have a paid-up capital of \$5,000, to post a surety bond or securities to the value of \$10,000 with the insurance com-

missioner, to obtain a certificate of compliance from the insurance commissioner, to permit him to examine their accounts as insurance corporations, to file annual reports with the commissioner and to license their agents. While the supervision of finances is thus provided, no attempt is made to exercise professional control over such groups.

Need for R. N.'s on Men's Wards

The committee on nursing of the American Psychiatric Association has found, as the result of a recent questionnaire, that ten state hospitals out of forty-nine conducting nurses' training schools had no registered nurses on the men's wards. Even this is a better showing than was made in previous years, it is pointed out in the *Bulletin of the American Nurses' Association*.

Arthur Noyes, superintendent, State Hospital for Mental Diseases, Howard, R. I., says: "There is no question that a more extensive employment of women nurses, both student and registered, on male wards improves the morale and raises standards of care in many respects."

Organizing the Admitting Department*

If the admitting department makes friendly contact with the public, cares for patients and their friends, discharges and follows them up in a manner satisfactory to the hospital, the staff, the patients and the community, then the department, its organization and its personnel are suitable for that hospital and that community

By LOUIS H. BURLINGHAM, M.D.
Superintendent, Barnes Hospital, St. Louis

IN MANY respects the admitting department is the most important department of a hospital. A hospital may have a preeminent staff, a fine building, up-to-date equipment, the best of nursing, efficient administration—all of these will attract patients but all will be handicapped if the admitting department is not up to standard.

The hospital must have the good will of the community and through the admitting department the outside world makes its first contact with the hospital. If the members of the public are well received by the admitting personnel, both on the telephone and personally, good will flows toward the institution from patients and their friends and also from the whole community. This good will brings to the hospital more patients, increased contributions for hospital funds and more bequests.

The admitting department, like the whole hospital, must be responsible and responsive to the community, but it must be definitely under the control of those who manage the hospital—a board of trustees, a university, a state or a city, and it must be directly responsible to the executive chosen by the trustees, the university, the state or the city.

By telephone the department personnel should make a pleasant impression on the public, and by the public is meant physicians, prospective patients, friends of patients and anyone having business with the hospital. By personal contact they should make welcome all persons coming to the admitting office for any purpose. They should see that the patients are promptly attended to, referred to the dispensary, to clinics if a preliminary examination is needed or to the house physician if the patient is an emergency case in need of immediate hospitalization. These are some of the ways by which an admitting officer can help to win good will for the hospital.

They should see that the patient is fairly dealt with as soon as a decision is made that he is to be admitted to the hospital, so that he is not persuaded to pay too much, and that the hospital is not allowed to accept too little.

To see that the patient is well received on the ward, and if conditions permit, to explain to the patient and especially to the friends and relatives of the patient the essential workings of the hospital is also an admitting officer's responsibility. Thus he can make adaptation to hospital routine easier for the patient, lessening his mental conflict and promoting prompt recovery. The admitting department should see that a letter is sent to the referring doctor, shortly after the patient is admitted. It should follow up the patients to see if they are happy in the hospital and if they think they are receiving satisfactory treatment, food and general attention. It can also follow up the accounts of the patients during their stay in the hospital.

Plan of Organization Varies Widely

When the patient is ready for discharge the admitting department can make certain that he is really ready to go home, has a place to which to go and someone to go with him. It can call in a social worker if that is necessary, and can see that a letter is sent to the referring doctor at once so he will know all about the case, what has been done and what is to be done. It can also ascertain if the account has been paid.

Everyone in the hospital is interested in the admitting department. The persons actually doing the work may be men or women, doctors, nurses, social workers, religious persons or lay persons, depending on the organization and the size of the

*This article is one of the Hospital Organization series, under the direction of Dr. Winford H. Smith.

hospital, the income, the type of hospital, whether public, religious or private. In all cases, however, they must be tactful, even tempered, sympathetic, socially minded. If social workers serve as admitting officers, they should be part of the administration and responsible to the administration. The attitude of the admitting department should never be that of an almoner dispensing the alms of the hospital, nor should it constitute itself the patient's advocate and try to get all that is possible for the patient from the hospital. It should function rather as a fact finder who is trying to bring the patient and the hospital into a relationship

where each can do the most possible for the other.

The plan of organization for the admitting department varies widely. In some hospitals, especially small hospitals, the superintendent does practically all the admitting. In others, physicians, nurses, social workers, members of religious orders, lay persons or clerks serve as admitting officers. There may be one admitting department for the clinics and the hospital, or there may be one for the clinics and one for the hospital. Some hospitals have an admitting department for the ward, one for semiprivate patients and one for private patients.

A Bit of Hospital History

Twenty years ago this month:

An editorial in the December, 1913, issue of *The MODERN HOSPITAL* welcomed the formation of the American College of Surgeons, which grew out of clinical congresses held in three preceding years. "We believe," stated the editorial, "that it has an opportunity for great usefulness, and, if its course shall be steered right, its creation should result in less surgery and better surgery in this country."

Dr. Ralph B. Seem, Dr. Karl H. Van Norman, and Dr. Rupert Norton were assistant superintendents at Johns Hopkins Hospital, Baltimore.

Frank E. Chapman was appointed superintendent of St. Louis City Hospital.

Dr. H. S. Mathewson of the United States Public Health Service urged hospitals to provide preventive medical service to their patients, particularly health instruction.

The lack of proper provision for adequate home nursing service was deplored by Richards M. Bradley, trustee of the Thomas Thompson Trust Fund.

A group of Detroit manufacturers organized a hospital to care for their employees under the terms of the recently enacted Workmen's Compensation Act.

The British Medical Association was all but disrupted on account of Lloyd-George's panel law providing for the medical care of the poor of Great Britain at greatly reduced rates. The association as a body fought the enforcement of the law, which was put into effect notwithstanding. Immediately the great bulk of the profession switched over, leaving the association in a most unenviable plight. Members deserted on the ground that the association had shown unwise leadership.

Sixty-five new members were elected to the American Hospital Association.

An investigation in the Cook County Hospital, Chicago, disclosed that many well-to-do people were being cared for there as friends of influential politicians.

"For a long time," stated an article in *The MODERN HOSPITAL*, "the lack of pupil nurses and the too limited number of graduate nurses to supply the ever growing demand has given great trouble and anxiety to physicians and hospital boards."

President Thomas Howell of the American Hospital Association announced the following as the executive committee of the association: Dr. A. B. Ancker, City and County Hospital, St. Paul; Dr. Lewis B. Baldwin, Minnesota Hospital;

G. W. Olsen, Swedish Hospital; Dr. Herbert O. Collins, City Hospital; Mrs. Sarah Knight, Asbury M. E. Deaconess Hospital and Home, all of Minneapolis.

Michael M. Davis, superintendent of the Boston Dispensary, reported that out-patient departments and dispensaries had increased fourfold in number in six years.

U. of C. Clinics Are Successful in Collection Efforts

The financial statement for the University of Chicago Clinics for the fiscal year 1932-33 shows that in spite of general economic conditions 95.03 per cent of the billed income for the hospitals and the out-patient department was collected, as compared with 93.16 per cent in the preceding fiscal year.

A comparison of the average cost per patient day for the hospital service given and the average income received during the last two years shows a decrease this year of over forty cents a day in the deficit, despite the fact that the income per patient day decreased and the number of patient days was slightly lower. The figures follow:

	1932-33	1931-32
Number of patient days	62,689	64,392
Cost per patient day	\$6.6530	\$7.4830
Income per patient day	2.7121	3.1408

Deficit per patient day \$3.9409 \$4.3422

The detailed figures for the out-patient department are as follows:

	1932-33	1931-32
Number of visits	138,976	126,584
Cost per visit	\$1.3951	\$1.7062
Income per visit	1.2948	1.4455
Deficit per visit	\$0.1003	\$0.2607

A Ten-Page Hospital Report

"A Small Hospital in a Big Depression" is the engaging title of the 1932 annual report of the West Side Hospital and Dispensary, New York City. Although only ten pages long and mimeographed, the report makes a good impression by its neatness and brevity.



St. Mary's Marks Golden Anniversary With a New Plant

By VICTOR J. KLUTHO

Architect, St. Louis

IN THE year 1882, when Racine, Wis., was a much smaller city than it is today, the Franciscan Sisters established St. Mary's Hospital. It was a small institution accommodating only twenty-five patients. After fifteen years the structure proved inadequate and an addition was erected. The number of patients continued to increase and again the necessity for expansion became a problem, with the result that in 1906 another addition was built.

That the untiring devotion of the Sisters to their work of caring for the sick won for them the ad-

miration and support of the entire community was evidenced by the rapid and consistent increase in the number of patients which frequently taxed the capacity of the institution.

Realizing the need for a larger and more up-to-date hospital, the owners decided after careful deliberation to build a new hospital, a hope they had cherished for many years. Its erection was made possible by the cooperative spirit of the people of Racine. Pledges solicited during the campaign amounted to \$250,000. Of this amount more than \$170,000 was collected, a large percentage considering the financial disaster that followed the drive so closely.

The new hospital, recently completed at a total cost, including fixed equipment, of \$882,843.35, occupies the north portion of a plot of land rectangular in shape. The building faces one of the major thoroughfares. The south portion of the property is occupied by the old hospital buildings which are still in use.

After a thorough study of the site the H plan was adopted as being most suitable from the standpoints of light, convenience for service and exclusion of disturbing noises. The style of the building shows the influence of Italian Renaissance archi-



The main kitchen, dining rooms for nurses, doctors and help, storage space and a large lecture room are on the ground floor.

A completely equipped emergency department and clinic for in-patients and out-patients are on the ground floor near the ambulance entrance.

ensure an absolutely watertight building.

On the ground floor is the ambulance entrance, accessible to the elevator leading to the surgical department. In close proximity thereto are a completely equipped emergency department and clinic for in-patients and out-patients, as well as the morgue and necropsy room. The remainder of the floor contains dining rooms, storage rooms, a lecture room and culinary department.

ecture. Its exterior is pleasing, simple and in keeping with the purpose of the structure.

The building is of reenforced concrete construction throughout. Exterior walls are of brick with stone trimmings. Granite was used for the base. Interior partitions are of hollow tile, plastered on both sides, except in the basement where glazed tile was used for the wainscot. All floors are of terrazzo with the exception of the floor in the operating department which is covered with vitreous tile. The floor of each room has a distinct pattern and color.

Walls of all private toilets and bathrooms, as well as those in the operating department and sterilizing rooms, have vitreous tile wainscot, while all general bathrooms have wainscot and stall partitions of marble.

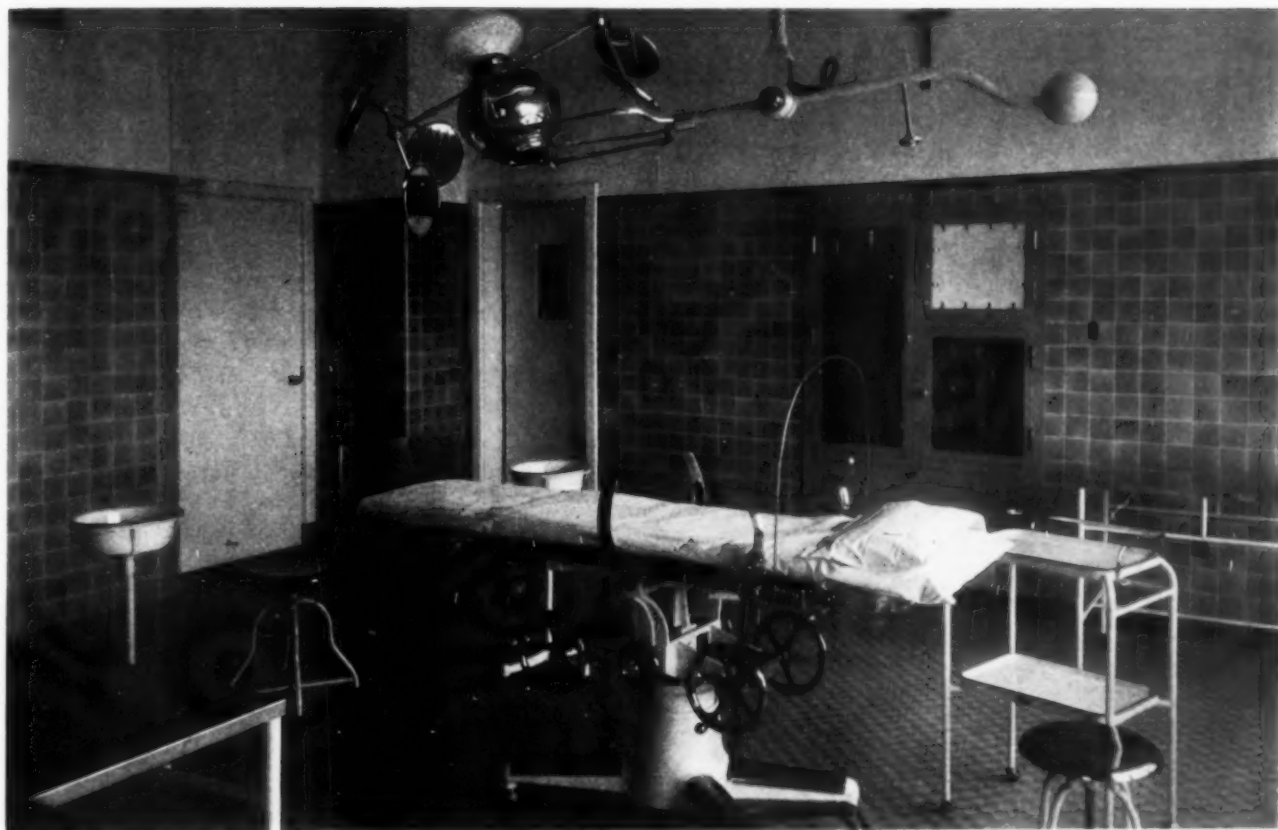
The structural work of all stairs is of reenforced concrete and the treads and risers are of terrazzo. Railings are of hollow tile with plastering on both sides. Capping and handrails are of wood. All windows in the building are provided with reversible window devices to facilitate cleaning.

The entire roof of the building is insulated with 2-inch thick cork. Interior surfaces of all exterior walls were treated with waterproofing material previous to the application of plaster in order to

On the first floor are the lobby with reception rooms, a waiting room and the administration department as well as interns' quarters, suites for the chaplain and visiting priests, the pharmacy and the necessary service rooms. The remainder of the first floor is utilized for patients' rooms. The second and third floors are devoted entirely to patients, each floor containing forty-one private rooms and two four-bed wards, with the necessary service rooms.

The fourth floor comprises the obstetric department with the nursery and maternity patients' rooms. The remainder of this floor is given over to patients' rooms. The fifth floor is the medical service floor. Here are the operating, x-ray, therapeutic and pediatric departments. The laboratories are also on this floor.

Upon entering the lobby the visitor finds an atmosphere of restful quiet. Walls are of warm yellow polished marble. The floor is of patterned terrazzo outlined by wide brass strips. The ceiling is of molded plaster, decorated to harmonize with the rest of the work. The business office, reception and waiting rooms, main stairs and elevator are directly connected with the lobby and conveniently arranged. Bronze elevator doors add considerably to the attractiveness of the lobby.

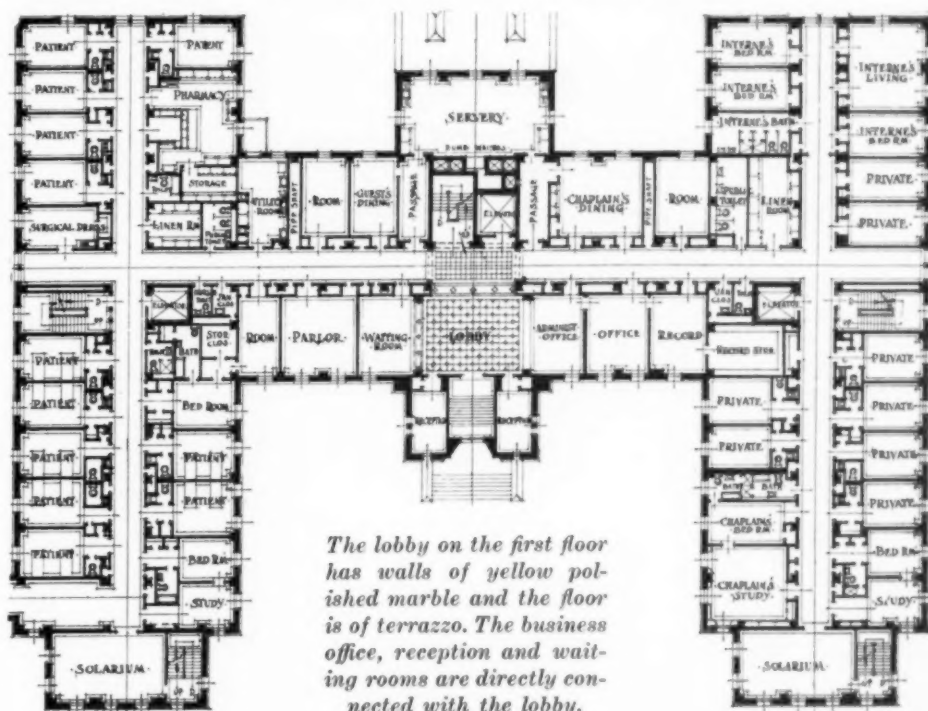


Study of the plans will reveal that each floor is divided into two independent units. Each unit has separate stairs, elevator service, utility and surgical dressing rooms, linen and general toilet rooms, all controlled from the central nurses' stations. Each room is provided with a private toilet containing a water-closet and a lavatory. Attached to the water-closet is a spout for cleansing and emptying bedpans.

At the bedside of each patient is found a push button which operates the nurses' call system. When the patient presses the button, it causes the buzzer to ring momentarily in the annunciator at

the nurses' station. It also lights four white lamps—one in the corridor over the patient's door, one in the annunciator at the nurses' station, one in the master annunciator in the administration office and the pilot lamp placed at the ceiling at the intersection of the corridors.

Each patient's room is also equipped with an



The operating department comprises one minor and two major operating rooms, one of which is shown above.

The lobby on the first floor has walls of yellow polished marble and the floor is of terrazzo. The business office, reception and waiting rooms are directly connected with the lobby.

emergency call switch which causes the emergency bell in the annunciator at the nurses' station to ring continuously and which lights three red lamps—one in the annunciator, one above the patient's door and one in the ceiling at the intersection of the corridors. Both the push button and the switch can be reset only at the bedside from which the call originated.

The question of lighting was given due consideration. Bracket lights were installed instead of ceiling lights. An outlet for a bedside lamp is also provided. A hooded night light is placed above the base with control switch at the door. A fan outlet

Laboratories consist of three rooms—one working, one research and one basal metabolism laboratory. The equipment of these laboratories includes the following: a built-in high pressure steam autoclave, a centrifuge, a fume hood with vent through the roof, a still and a refrigerator, together with the necessary work tables, sinks and storage cases.

The x-ray department consists of radiograph and fluoroscope rooms with control booths, dressing booths and toilets adjoining each. In connection with this department is a dark room for the development of plates. Across the corridor are



A restful atmosphere prevails in the entrance lobby. The walls are of polished marble and the floor is of patterned terrazzo.

and a telephone jack are conveniently placed in each patient's room.

The operating department comprises one minor and two major operating rooms with sterilizing and scrub-up rooms adjoining, one orthopedic and one eye, ear, nose and throat operating room, cystoscope room, instrument room, utility room and cart storage. One of the major operating rooms is provided with an observation platform for students.

Sterilizers of the high pressure steam type are built into the wall. Easy access may be had to the inclosure in the event of repairs. Adjoining these sterilizers are containers or drums in which sterilized goods may be stored until needed. All cabinets in this department are of steel and are built into the wall.

display and file rooms. A film storage is in one of the penthouses, entirely isolated from the hospital, with access from the roof only. Adjacent to the x-ray department is a room for deep therapy work with control, dressing and toilet rooms in connection. This room is thoroughly rayproofed from adjoining rooms and corridors. The windows of the entire department have lightproof shades.

The therapeutic department includes an office, static room and cubicles for ultraviolet ray and other treatments. It also contains dressing booths and toilets as required by this department.

The pediatric department comprises nine private patients' rooms, two isolation rooms, two wards, one infants' room with service and food preparation rooms in connection, utility room, surgical dressing room, linen room, servery, children's

general toilet and bath, nurses' station, lounging and playrooms.

On the fourth floor is a completely equipped department for maternity patients. Here are two delivery rooms, two labor rooms and a preparation room, with sterilizing room, utility service room, doctors' room and scrub-up room. Walls in this department are faced with vitreous tile of appropriate colors. Sterilizers of the high pressure steam type are built into the wall. The equipment of this department is similar to that of the operating department on the fifth floor.

In connection with this department is a large

this room the linen is conveyed by trucks through a tunnel into the laundry. Utility rooms are also equipped with incinerators, bedpan sterilizers, a dust chute and built-in storage cabinets.

The culinary department is on the ground floor, at the rear of the central wing and directly connected with it. This department consists of a main kitchen, diet kitchen, bakery storage room, vegetable room, refrigerators and a receiving room. The basement is utilized for refrigerating rooms and general storage. This department is served by an electric elevator.

Central service is used for the distribution of



The patients' rooms are nicely furnished. Bracket lights are used in place of ceiling lights.

nursery with nursery service adjoining, where newborn babies are cared for. An isolation room with service room for babies who show suspicious symptoms is also provided. Each service room is equipped with an infants' bath, a dressing table, a pasteurizer and the necessary storage cases. An incubator for prematurely born infants has also been installed in the nursery. Walls and ceilings of this department have been treated with acoustical material.

On each floor of the hospital building are two rooms devoted to utility service. These rooms might be termed nurses' workrooms. Here the nurses find the necessary equipment for the many duties they must perform for the patients. Here, too, are the soiled linen chutes leading into a receiving room for soiled linen in the basement. From

food. In the main kitchen a space is reserved for parking and heating food carts. Food is placed in the carts and sent by elevator to the various floors where it is served. After the patients have been served trays are collected in tray carts and sent to the central dishwashing room by means of conveying equipment which mechanically takes them to the dishwashing machine.

Two dumb-waiters communicate directly with the serveries on the various floors for the handling of any special service to patients between regular meals. This system is so arranged that it can also be used in the event the central service system should be abandoned.

St. Mary's Hospital will accommodate 148 patients in private rooms and thirty-eight patients in wards. The private patients' rooms are large

Each floor is divided into two independent units. Each unit has separate stairs, elevator service, linen and general toilet rooms, all controlled from the central nurses' station.

enough so that they will, in an emergency, accommodate two beds each, making a total bed capacity of 334. The nursery in connection with the obstetric department affords space for fifty cribs.

The hospital building contains three elevators, one in each of the north and south wings and one in the central wing directly opposite the lobby. These elevators are of the collective control push button type and serve all floors including the attic. An electric push button type elevator serves the kitchen wing.

Much study with regard to efficient and economic management resulted in the installation of the following systems: nurses' call and emergency call system, doctors' paging system, doctors' in-and-out registering system, code calling system, ambulance and night bell system, fire alarm sys-

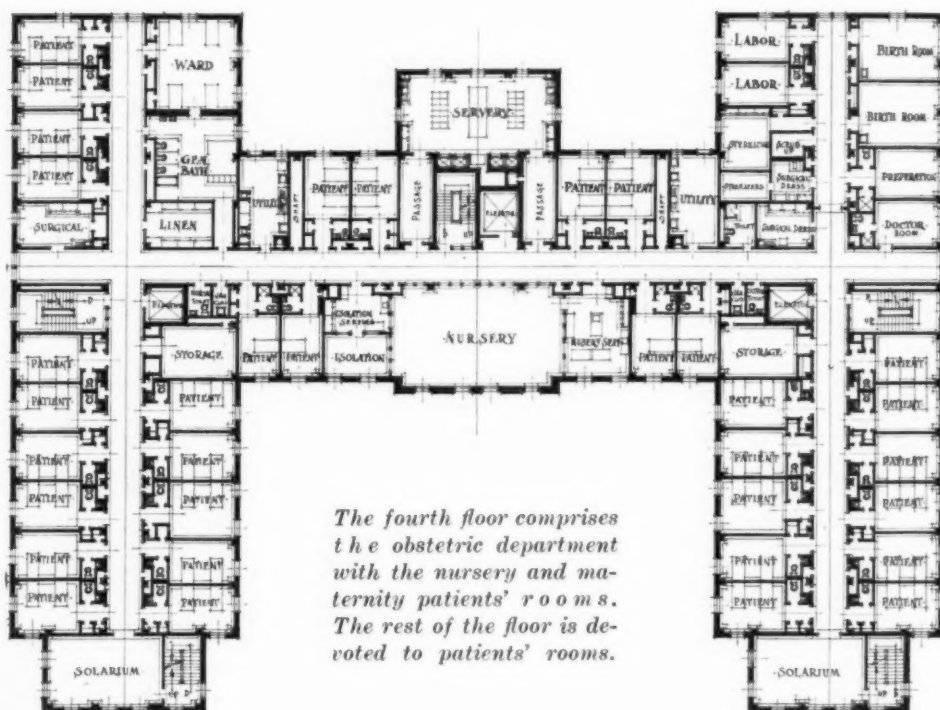
tem, automatic private telephone system and electric clock system.

An emergency electric generating plant has been installed to serve in the event of a breakdown in the main light and power system.

The service building is two stories in height and of fireproof construction. The basement contains the heating and refrigerating plants. Laundry equipment is on the first floor, while the second floor is arranged for living quarters for male employees. An electric push button type elevator serves the basement, first and second floors.

The basement, first, second and third floors of the new and old hospital buildings are connected by covered passageways. An underground tunnel connects the new hospital with the service building.

The cost of some of the major equipment installations was as follows: terrazzo and tile work, \$94,247.14; plumbing and drainage work, \$81,801.30; heating and ventilating system, \$59,774.20; electrical work, \$39,643.86; laundry equipment, \$20,541.35; refrigerating equipment, \$13,876.85.



The fourth floor comprises the obstetric department with the nursery and maternity patients' rooms. The rest of the floor is devoted to patients' rooms.



The fifth floor is the medical service floor. Here are the operating, x-ray, therapeutic and pediatric departments and also the laboratories.

Eight-Hour Day for Special Nurses— Some Experimental Results

By JANET M. GEISTER, R.N.

Newark, N. J.

When a hospital inaugurates the eight-hour day for nurses, everyone concerned with the project must thoroughly understand why and how it is to be conducted; there must be a genuine and practical spirit of co-operation; there must be no mandates from one group to another; there must be no additional cost to the patient; the project must be entered upon in a spirit of experimentation and local adaptations must be made

TO ONE who is acutely mindful of the heated and oftentimes bitter opposition that marked the adoption of the twelve-hour day for special duty nurses, the friendly, cooperative spirit of present day discussion on the eight-hour day comes as a happy omen.

In attending a fairly typical range of annual meetings of state nurses' associations this autumn, I have been impressed with this new attitude on the part of nurses and their hospital and medical allies. Several factors influence current thought.

The philosophy of the NRA in its insistence that every job should provide sufficient off-duty hours to ensure leisure for the worker has had a leavening effect on those who heretofore have considered the nurse to be the exception in a world steadily progressing toward a shorter working day.

A further factor is the NRA policy of encouraging the distribution of available work over as many workers as possible.

A third factor, involving the most important practical consideration, is that the eight-hour day plan most commonly adopted can be effected with little or no additional cost to the patient who has

formerly employed two twelve-hour nurses. In some instances the cost is actually lower.

A fourth factor is greater elasticity in nursing service. With the adoption of the twelve-hour day the old tradition of requiring unbroken twenty-four-hour service from the same nurse for the duration of each case was broken. This idea of continuous service, held by some nurses, some physicians, some hospital administrators and by some members of the general public, had definitely retarded the development of plans that promised a more equable and healthful arrangement. The adoption of the twelve-hour day brought partial recognition of the fact that nursing care could and should be adjusted to the patient's needs—continuous care for a short period, followed by a progressive reduction of service.

Fifth among factors influencing the present attitude toward the shorter day is the conviction reached by a large group of nurses that the twelve-hour day offers few real advantages to the individual nurse over the traditional twenty-four-hour period. The prime purposes of the twelve-hour day, as promulgated by nurses, were, in addition to safeguarding the patient, that it offered opportunities to the nurse for a better balanced life and that it prevented excessive fatigue. Experience has shown, however, that the time the nurse required for travel to and from her case, for changing to and from her uniform, added to the twelve hours of a working day, offered little release from the fatigue and isolation of the older system. The two distinct advantages gained by the twelve-hour day were that the patient had more alert nursing care and the nurse had the privilege of retiring to her own home at the end of her shift.

Nurses base their plea for an eight-hour day on the premise that an overlong day for the nurse is inimical to patient as well as to nurse, and that the patient's best interests are served only by a rested nurse with enough leisure to keep up her study and to maintain her social contacts. They

FEE SCHEDULES FOR NURSES UNDER EIGHT-HOUR DAY PLAN

<i>City</i>	<i>Hospital</i>	<i>Rate per Nurse per Day</i>	<i>Meals per Nurse</i>
Los Angeles	Good Samaritan	\$5.00	none provided
New York	French	5.00	75c for 2 meals
Chicago	Albert Billings	4.00	50c for 1 meal
Waterbury, Conn.	Waterbury	4.50	50c for 1 meal
Washington, D. C.	Providence	4.50	50c for 1 meal
Baltimore	St. Agnes	4.50	50c for 1 meal
Englewood, N. J.	Community	5.00	\$2.00 per day for all nurses
Minneapolis	Dist. Nurses' Assn.	5.00	1 meal
St. Louis	Dist. Nurses' Assn.	5.00	none provided

offer to absorb all or most of the cost entailed in providing a third nurse through reducing their fees and eliminating all or a part of the meals usually provided.

The movement toward the eight-hour day is rapidly passing from the discussion stage into one of experiment, and the experiments are rapidly broadening in scope and in number. Notably in California, ventures have been carried on for periods sufficiently long to demonstrate the value of this type of service and to offer certain guiding principles in its administration. More than thirty hospitals scattered throughout the United States are known to have adopted the eight-hour day, many of them within the past year.

Greater Elasticity Is Afforded

Twenty hospitals definitely reported the scheme under which they are operating together with a statement on its advantages and disadvantages to Minnie Pike, chairman of the eight-hour day committee for New York City. It is significant that none of the twenty hospitals reporting in this study gives any hint of discontinuing the plan. The tone of their replies is uniformly enthusiastic.

It is evident from a study of the existing projects of the eight-hour day that no two plans are precisely alike. Each project is adapted to the individual hospital or to the locality and that, of course, is one reason the plan is being carried out successfully. In some institutions both the twelve and eight-hour units are available.

Hospitals report that the system is put into effect without confusion or administrative difficulty because the mechanism necessary to the employment of one special duty nurse or two is precisely the same as that needed when three are employed. The hospital maintains the administrative responsibility for synchronizing and supervising the service rendered the patient. For the patient ill at home this administrative responsibility is carried by the nurses' registry.

An advantage of the eight-hour system frequently mentioned by nursing administrators who

follow the plan is the greater elasticity afforded by the shorter time units. The physician may order special care in eight-hour units adapted to his patient's advancing or receding needs. This makes possible a reduction in the total cost of nursing care to the patient.

The fee schedule varies with each institution. In every instance the nurse has accepted a smaller fee than she received for the twelve-hour day, and in practically every instance she is providing at least one of her meals. In a few cases nurses provide all their meals. The cost of three nurses in some institutions is one dollar a day more than the old fees for two. Other institutions have so arranged the plan that the cost is exactly the same, while in a few hospitals the cost is one dollar a day less. Fee schedules with the adjustments for meals vary considerably, with the total daily cost to the patient ranging from \$13.50 to \$17 according to the institution. A few typical examples are given in the accompanying table.

The new arrangements regarding nurses' meals appear to open a way for the solution of the vexing problem of special nurses' board. The present policy of charging the patient for this board has never been popular with patients and yet hospitals have felt they could not carry this cost.

Under the eight-hour plan the nurse needs to have but one meal in the hospital or possibly two, according to the time schedule. Fear has been expressed that nurses who now must provide part or all of their board would be tempted to eat the patient's food. From Los Angeles, where the majority of hospitals have had long experience with the eight-hour day system, comes testimony to indicate that this is a groundless fear. "The nurse who will eat a patient's food because she is paying her own board," says Ethel Swope, "would eat the patient's food if her board were being paid by said patient. We believe this number to be small."

Cases have been reported in which hospitals have given the money paid by the patient to the nurse with the request that she purchase her own food. This has not been found satisfactory.

The eight-hour nurse, for the most part, eats in the hospital dining room as usual. The cost of her food is charged against her or against the patient, according to the hospital system. A hospital cafeteria is sometimes available. The nurse has a meal ticket purchased either by the patient or by herself. The ticket is punched according to the amount of food she takes.

The foregoing adjustments regarding nurses' food appear to give general satisfaction. In one hospital where a \$5 flat fee with no meals prevails, a nursing administrator states: "Patients are satisfied when they receive their bills and find they do not pay the nurses' board. Paying for nurses' meals has been one thing the public could not understand." This opinion is reflected in other similar comments.

Patients Like the Plan

The time schedules most commonly adopted are those that have been established for the student nurse body—7 a.m. to 3 p.m., 3 p.m. to 11 p.m. and 11 p.m. to 7 a.m. Several hospitals have found it more convenient to begin the day at 8 a.m. and maintain periods of from 8 a.m. to 4 p.m., 4 p.m. to midnight and from midnight to 8 a.m.

A genuine effort has been made to learn the disadvantages and criticisms of the eight-hour system. Before the experiments were actually under way the most frequent objection raised by physicians was that patients would react unfavorably to so many nurses. Some nurses objected to the proposal because they feared their incomes would be materially reduced. Patients objected on the grounds that the cost might prove higher.

Once the experiments were instituted, the chief criticism of physicians was that they never saw the nurse whose shift extended from 11 p.m. to 7 a.m. Some nurses felt that the time schedule should be adjusted so that the late afternoon and evening nurse could be relieved early enough to get transportation home. In certain small communities street cars and busses make their last run at 11 o'clock.

Experience has shown that the expected disadvantages did not materialize. That patients are highly pleased with the eight-hour plan is evidenced again and again in the statements of nursing administrators. Theresa J. Ryan of Cedars of Lebanon Hospital, Los Angeles, states: "It has been most satisfactory from the patients', doctors', hospital and nurses' viewpoint. . . . The patient enjoys the change at 3 p.m. for at that hour the morning nurse is becoming fatigued and another nurse appears on the scene with new energy, vitality and cheer. The schedule is agreeable to the doctor since it costs the patient less."

After a four months' trial at St. Vincent's Hospital, New York, the doctors declare the change "eminently satisfactory; patients found nurses maintained a maximum of alertness and general efficiency for eight hours and gave better service."

These expressions of satisfaction with the eight-hour plan are typical of all the statements that have been obtained. They show fairly conclusively that patients are pleased and better served with three nurses than with two. The matter of the physician's inability to see his third period nurse—11 p.m. to 7 a.m.—could be obviated by having the nurse call on the doctor during the day. Rearrangement of the schedule to ensure safe transportation for the second period nurse as she comes off duty should not be difficult to accomplish.

Without question the eight-hour plan has been successful in increasing the employment of nurses. In Los Angeles statistics kept over a period of years show that approximately 26 per cent more nurses are employed under the eight-hour plan than would have been employed under the twelve-hour plan. Others state: "There is no doubt but that the eight-hour day has greatly relieved the pressure of unemployment in this community." "The eight-hour day has increased employment, the nurse is more fit, she is happier and more alert."

In regard to the nurses' earnings, indications are that the income for the nurse who has been having an average amount of work for the times remains about the same. Her daily income is lowered, but her hourly income is increased. What the new working schedule has meant in her life is summed up by one nurse: "Heretofore I have simply worked, traveled and slept. Now I have time for rest, for normal hours of recreation and for study."

A Step in the Right Direction

Is the eight-hour day the one way to solve the problem of more effective and economical nursing care for the average patient? Will it solve the major problem of nurse unemployment?

No, it is but a partial answer to either of these questions. It is a definite move in the right direction—an intermediate step from the system of continuous nursing service to one that can be adjusted to the patient's needs. It results in making special nursing more readily available to the patient of modest purse. Indications are that it absorbs one-fourth to one-third again as many nurses as would be utilized under the twelve-hour system, thus partly relieving the unemployment situation. It marks for the nurse a significant milestone in her endeavor to live a less isolated and more healthful life, and in the final accounting it gives to the patient a greater assurance of well balanced, alert nursing care.

Someone Has Asked—

Can a Patient Sign His Own Necropsy Permit?

Interns and others endued with unusual zeal in obtaining postmortem permissions are sometimes confronted with a willingness on the part of a patient to sign his own necropsy permit. The legality of such a step is often questioned.

During life, of course, a patient, having come of age, has a legal right to permit whatever surgical treatment he desires to be performed upon his own body. He may give away or sell his own property. Upon the death of a patient, however, the legal right of disposing of his body devolves upon others. From a practical standpoint the relatives or friends who expect to defray the expenses of burial are the persons to whom the right of signing a postmortem permission is given.

To be sure, a patient may legally set aside funds for the burial of his body and may direct that a postmortem examination be performed thereon. In such a case a necropsy permission signed by the patient himself would probably be legal. But in the average case, when no provision is made for the burial of the body and when the care of accumulated property is placed upon an executor, the latter's signature or that of a near relative is necessary in order that a necropsy permission may be made binding.

Should Garbage Be Weighed?

Control of kitchen methods should include not only the economic purchasing of food and the adoption of proper storage and issuance methods, but also the reduction of waste to the minimum. No matter how carefully standards have been worked out covering the portions served to patients, or the amounts of raw materials required to fill these standards, an economy plan is incomplete unless it takes account of the waste resulting after such portions have been served.

Some persons look with scorn upon the practice of garbage weighing. While this plan does not offer any royal road to economy, yet enormous waste results from careless food methods, particularly in hospital wards. Fairly accurate standards of waste have been worked out in some hospitals. It has been found that from three

to fifteen ounces per patient of presumably eatable food is wasted daily. The wide range of these figures indicates that in many cases much of the loss is avoidable and inexcusable.

The time and expense necessary to weigh garbage are usually small and when the plan functions efficiently the effect upon the morale of those handling food is often most interesting. Comparative waste figures can be presented at the weekly conference of supervisory nurses. It is surprising how these nurses will vie with each other to bring about creditable reports for their departments. When garbage is weighed it should be done daily. Whether or not careful figures are computed for each ward or department, the fact that notice is being taken of this important matter will serve to stimulate in all persons concerned a sense of property responsibility and economy. Garbage weighing and the proper use of the figures thus secured are not fanciful or useless procedures. They often result in a surprising saving in money.

Should Physicians Be Permitted to Borrow Supplies From Hospitals?

Often the doctor desires to administer salt solution intravenously or subcutaneously or to perform some minor diagnostic or therapeutic procedure in the home of the patient. This requires the use of sterile instruments and supplies. It is no easy matter for him to obtain on short notice a tray for this purpose and his mind instinctively turns to the hospital for help.

The institution can render a valuable service to members of its staff by lending hypodermoclysis, blood letting, spinal puncture, paracentesis and other trays for use in patients' homes. In many institutions this can be done without any hardship. On the other hand, the hospital must not be deprived of the necessities for performing its work promptly. In cases where both the physician and the hospital cannot be served, of course, the inter-

ests of the latter must be first considered. Some institutions keep available a number of sterile trays and a nominal fee is charged for this service. In other instances the physician provides his own supplies and equipment and the hospital sterilizes them for him.

It should be stipulated that loaned supplies must be returned to the hospital within twenty-four hours. Sometimes a deposit is required before an article is loaned. It is wise for the hospital to make itself as practically useful as possible to members of the staff. The adoption of such a policy by the institution is bound to raise the morale of the different members of the visiting staff.

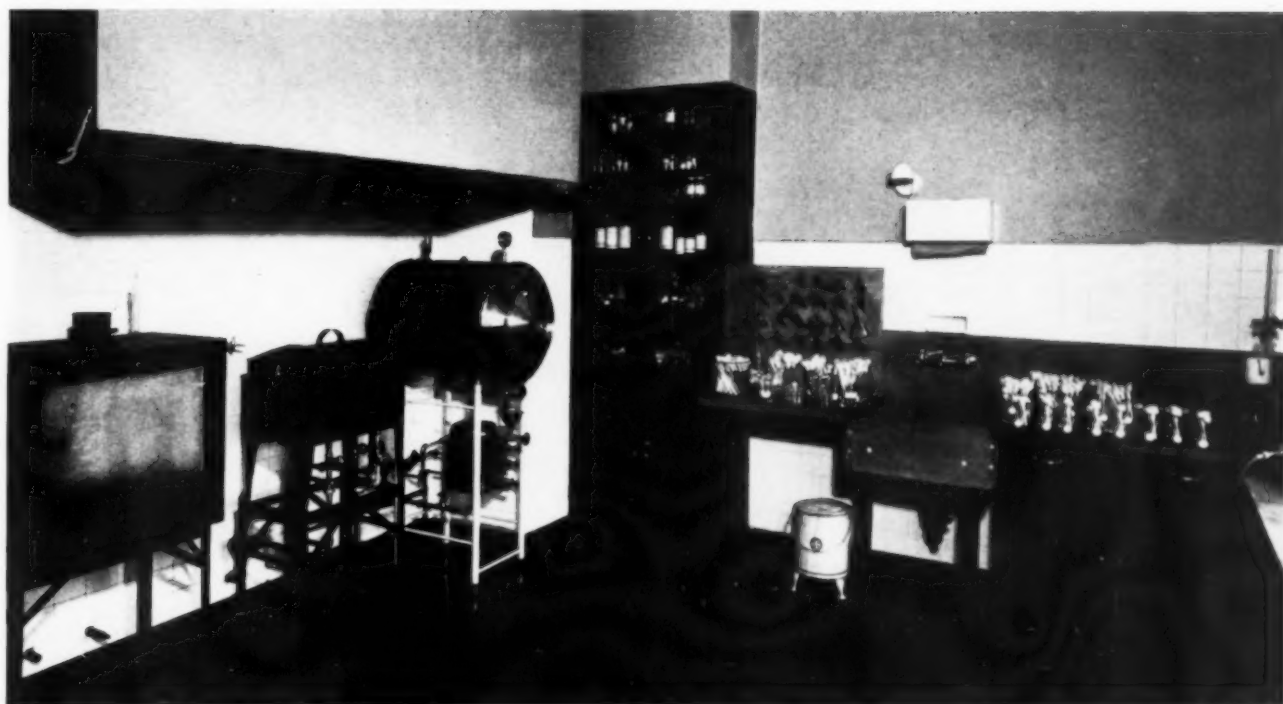
When Should a Birth Certificate Be Issued?

There seems to be considerable confusion in the minds of administrators as to the interpretation of the law governing tabulation of vital statistics. For example, the practice is not uniform as to the issuance of death and birth certificates for stillborn infants and for cases of miscarriage in the maternity department.

In some states the period of viability is legally set at four months. When a gestation is interrupted naturally or otherwise prior to four months neither a birth nor a death certificate is issued for the fetus. If pregnancy has existed longer than four months, both a birth and a death certificate must be issued and the mortality statistics of the hospital are thus affected. When a fetus older than four months is not claimed by the parents for burial, the hospital usually must secure permission from the local health authorities for disposal of the body. Usually permission is granted without question but the death certificate must be inscribed to show that such permission has been given.

Unless hospital authorities pay strict attention to the observation of local health laws in this matter, all sorts of abuses may occur and an institution otherwise practicing highly ethical medicine may be placed in a decidedly unpleasant light. While states may have varying regulations covering this matter, it is the hospital's duty to be fully informed concerning them and to adhere strictly to their provisions.

If you have any questions to ask, the editor will be glad to discuss these in a forthcoming issue



Operating the Hospital Laboratory on a Limited Budget

By JOSEPH FELSEN, M.D.

Director of Laboratory and Research, Bronx Hospital, New York City

AN ARTICLE that appeared in *The MODERN HOSPITAL* for October, 1931, presented a general plan of hospital laboratory organization.¹ This article deals with the practical application of such a plan in a new institution under the handicap of limited finances.

The new Bronx Hospital, New York City, erected at a cost of \$2,500,000, was opened in May, 1932. The economic situation made it necessary to limit the purchase of equipment and supplies to essentials and to economize in every possible way. It is estimated that the hospital's laboratories and research building cost \$100,000. The cost of the laboratory equipment, including chemicals, apparatus, sterilizers, incubators and two morgue tables, was \$5,000. The operating cost of the laboratory for the twelve-month period from July 1, 1932, to June 30, 1933, was \$9,467.26.

There is, of course, a marked difference in the type and volume of laboratory work in chronic and acute disease hospitals. The Bronx Hospital

is entirely an acute service institution and, as such, requires rapid laboratory examinations, both day and night. The bed capacity of the hospital is 313, and the average daily population is 240. The number of patients treated during the first year of operation of the new hospital was as follows: (1) resident—surgical, 3,313; medical, 862; pediatrics, 128, and obstetrical, 1,175; (2) out-patient department, 68,275 visits.

All hospital patients, except those with a minor ailment requiring only brief hospitalization, receive an admission blood count, a Wassermann test and a urine analysis. The first year's laboratory examinations totaled 26,751.

The laboratory staff consists of the director, one associate, two adjuncts in pathology, one adjunct in chemistry and one physician with a temporary status who is assigned to qualitative and quantitative prolan and sex hormone work, exclusively. There are also one pathologic intern, who is on six months' service, four technicians and a secretary.

The director supervises all the work. He collects museum and other exhibit material, arranges the

¹Felsen, Joseph. Analyzing the Functions of Larger Hospital Laboratories, *The MODERN HOSPITAL*, October, 1931, pp. 69-74.

didactic lectures and is in charge of research. Individually or jointly with the associate, the director makes all diagnoses in tissue pathology.

The associate is in charge of surgical pathology, and supervises the work of the two adjuncts. The adjuncts alternate monthly in examining all gross pathologic material and in postmortem work. They are also on emergency call for such times and procedures as may be necessary to supplement the work of the pathologic intern. In addition, one adjunct is curator of the museum and another is in charge of routine Friedmann (Ascheim-Zondek) tests. The adjunct in chemistry was chosen for the position because of his previous training in biologic chemistry.

Interns Given Laboratory Training

In the past the pathologic interns were chosen from applicants who subsequently completed their regular internship elsewhere. Now, however, applicants are selected who will go on the regular hospital intern staff as soon as their course in pathology has been completed. Moreover, we contemplate giving each intern a two months' course in the laboratory. The advantages of this arrangement are that it gives the pathologic intern a general knowledge of hospital laboratory routine and provides him with an understudy who may act as relief.

The intern is trained in all branches of laboratory work, but especially in pathology because of its fundamental importance. In the course of his term of service he is encouraged to study and present certain scientific material.

The secretary serves as a contact person between the hospital proper and the laboratory. She handles all requests for examination, inquiries, appointments, records, filing and distribution of reports. She also takes surgical pathology and postmortem dictation and prepares the necropsy protocols. Inasmuch as the director is also secretary of the monthly medical and surgical conferences, the secretary prepares for him the charts, postmortem reports and minutes in connection with these meetings.

The animal, operating and postmortem rooms are in charge of a diener who also cleans and sews up the bodies after necropsies have been completed.

The laboratory started with one salaried technician. All others were volunteers, mostly college graduates who were untrained in the hospital laboratory field. After six months' service, two of these volunteer technicians are attending medical school, and three are members of the present technical staff. Their remuneration is not high, but it is sufficient for their support outside the hospital. Five volunteers having been trained during

the past year and a half, in addition to those now on duty, no more are being taken on for the present because of the bulk of routine work. An exception was made during the past summer, however, when three selected medical students were permitted to work in pathology.

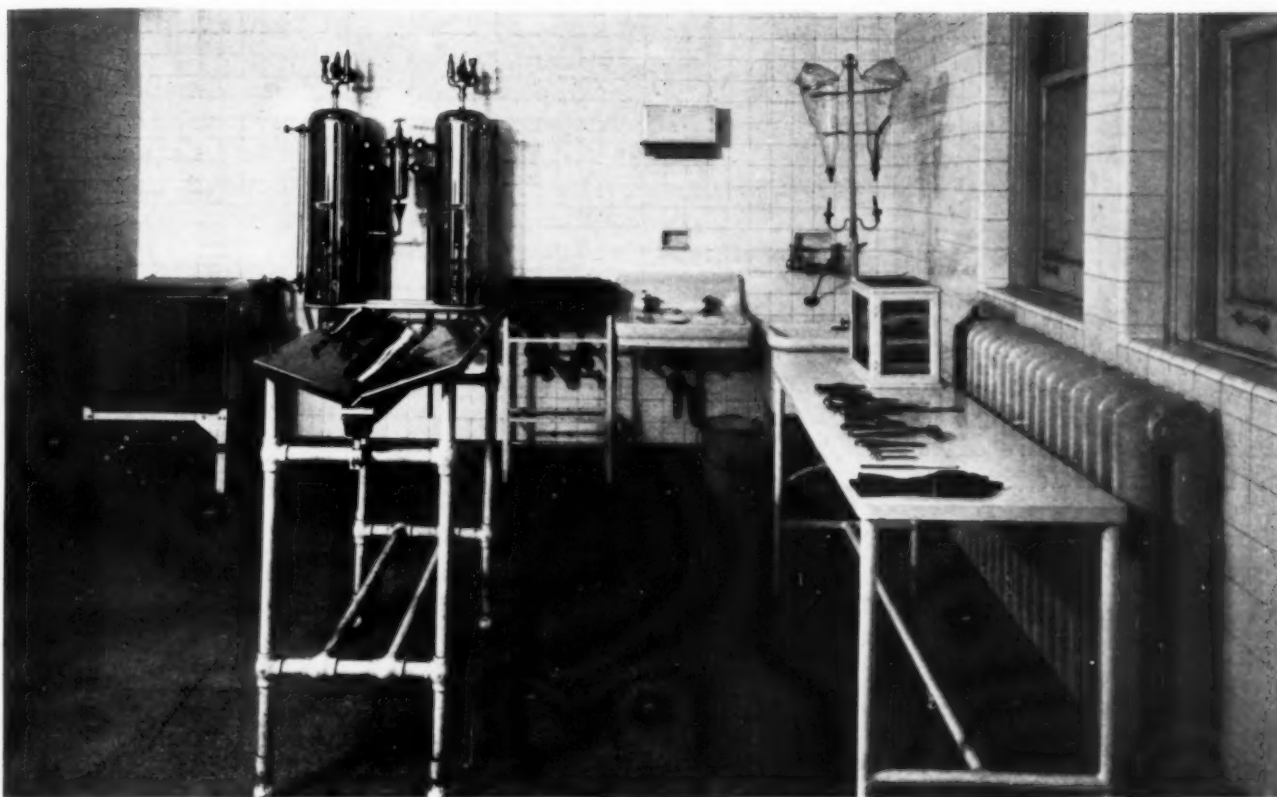
It was with some regret that this restricted policy was adopted, as there are on file the names of approximately fifty volunteers who are desirous of obtaining hospital experience. It is unwise, however, to offer a course in laboratory technique unless the institution is prepared to provide the time and supplies necessary for its proper execution. It is hoped that the facilities will be made available both to the lay and the medical personnel in the near future when finances permit. Teaching is one of the most important functions of the laboratory and when economic conditions improve the public health field probably will absorb the present surplus of laboratory workers. In the meantime, the hospital may afford many good technicians an opportunity to keep in practice or even to assist in research or other special work.

The pathologic department covers both surgical and postmortem pathology. The average time that elapses between the receipt of a specimen from the operating room and the rendering of the pathologic report is 6.2 days. All sections are cut and stained in duplicate. One slide and the original paraffin block are kept for the laboratory's permanent file. The surgeon may request the duplicate slide for his own records, it may be secured by another institution or it may be retained in the laboratory's duplicate file. One technician is assigned solely to the sectioning of tissues.

Explanatory Data With Each Specimen

The museum is intended primarily for teaching purposes. The proper selection and preservation of museum material has received much study both in this country and abroad. Specimens are divided into the following classifications at Bronx Hospital: those of general pathologic interest, those of special pathologic interest (collection of tumors of the colon and rectum, appendix collection) and those reserved for future study. Each mounted specimen is accompanied by a two-leaf display folder. One leaf of the folder contains the gross and histopathologic photographs and explanatory legends. The opposite, or facing leaf, contains a summary of the clinical aspects of the case and a detailed pathologic report. The opened folder is placed next to its particular specimen and provides the worker with a complete clinical and pathologic impression.

Every effort is made to gain consent for post-mortem examination on deceased patients. It has



The animal operating room in the Research Building contains the equipment necessary to carry on research work.

been found advisable for the house physician or house surgeon to establish the first contact with the deceased patient's relatives. He is usually in the best position to discuss the matter and obtain signed permission. Consent for complete necropsy is generally secured, and this includes routine examination of the brain and opening of the intestines. Protocols are written for each case. They include general statistical information, anatomic diagnosis, clinical and laboratory data, gross pathology, histopathology and epicrisis.

The epicrisis represents a concise correlation of all clinical and pathologic data. It is the pathologist's opinion as to the cause of death. The epicrisis may also include certain relevant comment on the interpretation of clinical observations made during life. The protocol thus becomes a vivid and interesting account of clinical phenomena and post-mortem interpretation. Its didactic value is inestimable. Unless a necropsy is done carefully and completely, it had better be left undone. Gracious consent on the part of relatives implies a certain responsibility on the part of the pathologist. Every effort is made at Bronx Hospital to shoulder this responsibility and to leave no room for criticism. Upon request, interested relatives are advised of the findings and a copy of the protocol is sent to the family physician.

Necropsies also offer a splendid opportunity to conduct studies that are not directly concerned

with the cause of death. Our laboratory has been interested in the colon and ductless glands and has made certain observations with regard to the former which it would be impossible to make by any other method.

Clinical-pathologic conferences are held regularly on surgical and postmortem material. Part or all of the members of the laboratory attending staff participate. The entire hospital staff is notified about five days in advance by means of printed postcards. Postcards are also sent to numerous hospitals in the city and to the New York Academy of Medicine for posting on their bulletin boards and to the local medical journals. The subjects and speakers are specified on the cards. The secretary of the laboratory also notifies each doctor whose case is to be presented. This tends to create a feeling of good will on the part of the clinical staff and is a much appreciated courtesy. Constructive suggestions are requested and free discussion is invited. This is an important practical point with an attending staff of 225. Stained sections and pictures are shown by means of projection machines, thus eliminating the necessity of making lantern slides.

The chemistry laboratory does all the routine analytical work and prepares colloidal gold and other chemical solutions for use in the other laboratories. All basal metabolic estimates are conducted by the chemist, who keeps on file all visible

records of tests. Bimonthly cream and milk analyses are made by the chemistry laboratory, and such items as ether, fuel oil and soap, which are used in considerable quantities by the hospital, are also tested by the chemist.

The serologic laboratory conducts routine Wassermann tests, using two antigens, and Kahn tests. The actual work is done entirely by the chief technician. Serologic tests and tissue diagnosis are of paramount importance in establishing confidence in the laboratory. If carelessly done, they may greatly impair the otherwise good reputation of a laboratory; if carried out with meticulous care, they often more than make up for possible shortcomings in other departments.

A Rapid Blood Transfusion Service

The bacteriologic laboratory is responsible for the periodic operating room sterility tests in addition to the usual routine work. A relatively large number of blood cultures are made. The equipment in this department is gradually being supplemented for intensive work on antiviral, bacteriophage and special anaerobic bacteriology.

All clinical pathology is handled by the laboratory staff with the exception of routine blood counts and urines, which are examined by the junior interns. All blood dyscrasias and any unusual urine chemistry are studied by the laboratory staff. Stained slides and relevant data are filed for future reference in connection with postmortem examinations or follow-up studies. All technical blood work is done by the chief technician who is specially trained in hematology. She is also responsible for all blood groupings and direct compatibility tests for transfusions.

A smooth, rapid blood transfusion service is essential in every first-class hospital. It is of prime importance to select donors with care and accuracy. With this object in view, the pathologic department established contact with the Blood Betterment Association of the New York Academy of Medicine about two years ago. All donors, except relatives of patients, are obtained from this source. These donors are already grouped, Wassermann tested, and have received blood counts and physical examinations. The chief reason for using only Blood Betterment Association donors is to cooperate with the association in its efforts to provide a high type of transfusion service. The same results may be accomplished by having either an individual or a combined hospital list. The latter arrangement, however, requires constant supervision and the recruiting of new donors and involves considerable expense. A special record of every transfusion is kept in the laboratory. The record includes technical data relative to both the

donor and the recipient, as well as a post-transfusion follow-up.

One technician is assigned to handle the laboratory work in connection with the diabetic and obstetric departments. This work is performed in the clinic so that the patients may have the benefit of prompt therapeutic advice.

Photographs of gross specimens, photomicrographs and lantern slides are made by members of the staff. It is planned to extend the use of the laboratory facilities for the photographing of unusual clinical conditions on the wards as a supplement to the laboratory studies.

Laboratory equipment should be selected on the basis of quality rather than price. There are many vendors of job lot and imperfect or rejected laboratory apparatus. It is false economy to purchase equipment from such individuals. The laboratory budget at Bronx Hospital is kept within the allotted sum by limiting the purchase of equipment to that necessary for accomplishing a definite piece of work either alone or in conjunction with the other departments.

While there are generally specific indications for the choice of a definite procedure, a less expensive test may be utilized occasionally without sacrificing accuracy. For example, routine blood cultures may be limited to one glucose agar plate and a nutrient bouillon flask. Anaerobic or specially enriched media may be used to supplement this routine in indicated cases. In this way there is a considerable saving of glassware, media and labor in institutions where between seventy-five to 100 or more blood cultures are made each month.

Director Studies All Reports

I supervise the routine work personally and keep in close touch with all current tests in each department. This enables me to discuss intelligently with physicians or surgeons cases that come up for consideration. The director who must refer constantly to the report book or interrogate a technician creates a feeling of uncertainty in the mind of the inquiring clinician. Every report is scrutinized by the secretary and by myself before it leaves the laboratory. In this way we have occasionally intercepted dubious or incomplete reports that slipped past an otherwise careful technician. The clinician bases his judgment solely on the written word, which cannot be retracted with dignity.

Individual research problems are assigned in keeping with the special interest of the investigator. In the past two years, three research papers have been written, each paper covering from twelve to thirteen months of investigation. Good research work cannot be done in the hospital laboratory unless the various departments are thor-

oughly organized to do routine work carefully. Research on a particular problem often involves the use of supplementary facilities, such as chemical analyses, bacteriologic or serologic studies. Care must be exercised in the release of laboratory investigations for publication. One piece of over enthusiastic work, improperly checked, may injure the reputation of a laboratory for many years. No article is permitted to be issued from this laboratory without my careful scrutiny and approval. To err is human, but the deleterious effects of the error may be reduced to a minimum if reasonable care is exercised.

Other activities that have been engaged in by the laboratory include two series of illustrated lectures on gynecologic pathology and blood. These lectures were given at the request of the gynecologic staff and the Society of Hospital Technicians, respectively. Scientific exhibits were shown at the

New York Academy of Medicine Fortnight and at meetings of the New York State Medical Society, the New Jersey State Medical Society and the American Medical Association. In addition, the Bronx Pathological Society was organized in cooperation with the pathologists from other hospitals in the Bronx and the medical examiner's office. One of the objects of the society is to present unusual pathologic material of practical interest and benefit to the average physician.

The laboratory fees at Bronx Hospital are arranged for four classes of patients. This system is patterned after a similar idea in use at another hospital in New York City and appears to have worked out satisfactorily during its first year.

The interests of good medicine, the patient, the community at large and the unemployed laboratory worker may be served adequately by a hospital laboratory notwithstanding a limited budget.

Cost per Patient Day Versus Cost per Patient Stay

By WALTER E. LIST, M.D.

Superintendent, Jewish Hospital, Cincinnati

STATISTICS to be of any value must be based on the honest interpretation of a mathematical formula; otherwise they are misleading and the picture they present is not a true one.

Recently the following statement appeared in hospital literature: "The pertinent question so far as the city is concerned is not the per diem cost at all, although the figure, because of its always ready availability, is always the one grasped and waved wildly in the air by the uninitiated. The important figure is the cost per patient stay."

That statement embodies a fallacy, and any accountant or hospital administrator with a knowledge of hospital accounting will refuse to agree with it.

From the standpoint of savings to an institution, the per diem cost is the only figure that should be taken into consideration. The cost per patient stay has no value from the standpoint of economy in the operation of a hospital. If a hospital in 1929 operated at a cost per patient day of \$3.05 and in 1931 operated at a cost per patient day of \$3.17, no accountant could interpret these figures otherwise than that the operating cost of \$3.05 per patient day represents a lower cost to an institution regardless of the length of the patient's stay.

In order to arrive at the per capita cost, it is necessary to divide the total number of hospital days into the operating expenses. In order to arrive at the cost per patient stay, it is necessary to multiply the per capita cost by the length of the patient's stay. This is simple arithmetic. It makes no difference whether the institution is a strictly charitable hospital or a voluntary hospital. In arriving at the cost of the patient stay, it will be observed that the hospital days already have been used to determine the per diem cost. These figures, therefore, cannot be used again in the consideration of savings to an institution.

Dealing With Mathematical Problem Only

The average cost per patient stay can be reduced by the simple process of discharging patients more quickly, but the so-called savings have no relationship whatsoever to economy in administration. We are dealing here, however, only with the mathematical problem and not with the therapeutic results accomplished by the earlier discharge of patients.

From the administrative viewpoint of financial savings to a hospital, the only figure of value is the per capita cost.

Why a Special Fracture Service Is an Asset in the Hospital*

By PHILIP D. WILSON, M.D.

Associate Chief, Fracture Service, Massachusetts General Hospital, Boston

RENEWED interest in the treatment of fractures has brought to the fore the question of whether in a hospital such injuries should be managed on the general surgical service or on a special fracture service.

What are the reasons for a special fracture service? First, bony injuries have become more frequent, due to the automobile and greater use of machinery. Second, they are important, socially and economically, because they strike chiefly at adults in their active wage earning period or at children, and thus affect the breadwinners of families or the future breadwinners. The annual cost of these injuries includes not only the loss of family income and expenditure for treatment, part of which is paid by liability and casualty insurance companies, but also the economic loss from reduction in productive capacity. Third, better care can be given in a special fracture service than in a general surgical service.

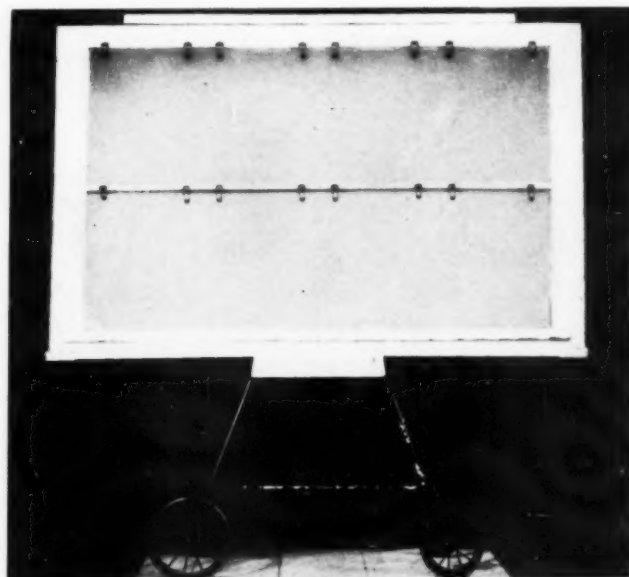
Patient Must Be Treated Promptly

Industrial accident insurance legislation in different states has served to focus attention on fractures and to increase the responsibility of the surgeon. Both from inside and outside of the profession have come demands for better treatment, for less residual disability and for a shorter period of disability.

For the most part these patients have been well and strong until their accidents occurred, and with their injuries healed they can be restored to health. Complete cure is possible in most cases but for this skillful treatment and organization are necessary. Services must be coordinated for the benefit of the patient. They must be available both day and night since it is now generally recognized that in fracture cases no amount of skillful treatment later on will counterbalance loss of time in the beginning. Interested, painstaking and experienced supervision is necessary during the patient's stay in the hospital. Several differ-

ent methods of reduction may have to be tried, and it is important to avoid waste of time and to secure reposition as soon after the injury as possible.

Reduction of the fracture does not mean an end of all difficulties. Plaster fixation can be employed only in a small proportion of fractures; the others must be treated by traction and suspension in apparatus that requires constant supervision and adjustment. Physical therapy must be started as soon as possible, and this often means that for the



X-ray illuminator carriage used for showing films at the time of the weekly fracture visit.

sake of safety the surgeon must himself administer it in the beginning. Provision must be made for prolonged follow-up treatment after the patient leaves the hospital. Unlike many of the urgent surgical conditions of the abdomen, which are cured except for ordinary convalescent care when the patient leaves the hospital, the recovery from a fracture requires many weeks or months of treatment after the patient leaves the hospital, and a potentially good result may be ruined at any time during this period by improper advice or lack of careful supervision. To gain the best results the follow-up treatment should be under

*This article is one of the Hospital and the Medical Staff series, designed to ensure better team work in the hospital through a fuller understanding of the interrelated problems of the medical staff and the administration. The first article of the series appeared in the January issue.

the personal and continuous supervision of the surgeon who treated the patient in the beginning.

There appears to be a certain incompatibility between the successful direction of an active surgical service and the management of patients with fractures. Treatment of the patients with general surgical conditions centers in the operating room, while in the case of patients with fractures it centers in the wards. It is difficult for the surgeon to find time after completing arduous and worrying operations to treat patients with fractures in his wards.

No One Plan Is Adaptable to All Hospitals

If the chief surgeon is more interested in the treatment of pathologic conditions of the viscera than in fractures, then the junior members of the staff are also apt to have similar interests. Furthermore, it is practically impossible for the surgeon who is on duty in the house to take any part in the supervision of patients with fractures who have been discharged to the out-patient department. Thus their treatment suffers from lack of continuity. This does not mean that the surgeon who directs a surgical service may not also be able to treat fractures well, but only that it is difficult to do both at the same time.

Surgery has never been content merely to stand still; it seeks constantly new and better methods of treatment. This can be accomplished only by selecting young, interested surgeons and giving them the opportunity to acquire experience by treating a large number of fractures under expert supervision. Fractures must be segregated, all necessary apparatus supplied, records accurately kept, proper follow-up care organized and the opportunity of seeing and studying end results provided. Under these conditions fracture treatment will go ahead and progress will be made. Fracture treatment must be shown at its best for the benefit of the medical students and members of the house staff.

The plan to be followed in organizing a fracture service must vary according to local conditions and needs. No single plan is adaptable to all hospitals, and since the field is a new one it is desirable that experiments should be made along different lines. The fracture service of the Massachusetts General Hospital, Boston, was one of the earliest to be organized in this country. A beginning was made in 1916 under the leadership of Dr. Charles L. Scudder, who organized a fracture squad with a staff of four surgeons, two from each of the two general surgical services. To them was assigned the treatment of all fractures both in the hospital and out-patient department. Each surgeon served six months in the house and six

months in the out-patient department alternately. Following Doctor Scudder's retirement from active duty in 1920 and the return of the members of the surgical staff who had been away on military duty, the service was reorganized on its present basis and only minor changes have been made since.

Equal representation on its staff is given to each of the two surgical services and to the orthopedic service. Dr. Daniel F. Jones was appointed chief of the service, and still holds this position, and the chief of the orthopedic service was appointed orthopedic consultant and acted as associate chief. This post has been held successively by Dr. Robert B. Osgood and Dr. Nathaniel Allison. To the fine leadership, enthusiasm and devotion of these men the service owes in large measure whatever progress it has made. Following the resignation of Doctor Allison the position of associate chief was created and replaced the position of orthopedic consultant. Both the chief surgeon and the orthopedic consultant held the view that the interests of the service would be served better if they acted in an advisory capacity only.

The service has been divided into three sections, east surgical, west surgical and orthopedic. Originally six men were appointed to serve as junior surgeons, two from each of the three services represented, each member of each pair to serve alternately six months in the house and six months in the out-patient department. As patients with fractures were admitted to the hospital, they were assigned in rotation to each of the three sections of the service so that an equal division of cases was obtained. Later as the various surgeons advanced in rank in the hospital and found it necessary to give their time to other tasks, additional surgeons were appointed to the staff to take over the active treatment of patients, but the older members retained their connection with the service and were available for advice and graduate teaching. In this way the staff has grown until now the names of twenty-two surgeons are carried on the service roll. Only twelve of these participate in the active work of treating fractures.

Patients Are Seen Immediately on Admission

The care of surgical patients admitted to the emergency ward is under the charge of two teams from the surgical house staff, each serving twenty-four hours and alternating with the other. Patients are seen immediately on admission to the hospital, and emergency or first aid treatment is administered.

Fractures of the long bones are immediately splinted by the application of Thomas traction splints in order to prevent additional soft part

trauma, to lessen shock and to relieve pain. Traction is applied by loops of bandage with windlass tension in the way that this was done on the battlefields. Compound wounds are cleaned and protected with sterile dressings. Patients who show evidence of surgical shock are placed on a steam heated shock table and given intravenous injections of salt solution or blood transfusions when indicated. Only such examinations are made as are necessary and will not disturb the patient. X-ray service is constantly available and diagnostic films are made of all regions suspected of injury.

The Surgeon's Responsibility

As soon as the diagnosis of fracture is made the patient is formally transferred to the section of the fracture service whose turn it is to receive the next admission in accordance with a list of fracture admissions kept in the emergency ward. The intern of this section of the service informs himself of the diagnosis and of the patient's condition and immediately notifies his visiting surgeon. In all but minor cases the latter responds in person, and either reduces the fracture or outlines the treatment to be followed. Responsibility rests upon the surgeon regardless of whether he delegates the treatment to the intern or not.

Facilities for the reduction of fractures under fluoroscopic control are constantly available, and in any case, post reduction control films are always made for the purpose of record. Compound fractures are treated by operative débridement, thorough cleansing and immediate reduction. Ambulatory patients not requiring hospital admission are discharged to the out-patient department following treatment. If reduction has been performed, they are usually kept in the hospital overnight and discharged the next day. Notes of the diagnosis and treatment are sent to the out-patient department to be attached to the patient's record.

All house fracture patients are segregated in male, female and children's wards. These are large, well lighted wards with outside porches to which bed patients can be rolled when the weather permits. All splints and fracture equipment with the exception of operating instruments are under the charge of an experienced fracture orderly who is employed by the hospital for this purpose.

The splint supply room is in proximity to the brace shop so that repairs can be conveniently made. There is also a fracture supply cart in which all material commonly needed for the splinting of fractures is kept. This is fitted with a hinged top, and is kept locked, the key being retained by the fracture orderly during the day

and by a supervisor of nurses at night. This precaution is necessary if the cart is to be kept well stocked. Unit types of Balkan overhead frames are employed that can be set up quickly. All splints and braces are manufactured by the brace shop. Many Thomas caliper braces are employed in the convalescent treatment of fractures of the lower extremity, and these with whatever other types of braces are needed are sold to the patients at cost plus a small charge to cover overhead. A cash deposit or guarantee is required before the brace may be ordered. If the patient is without means, help is obtained from funds administered by the social service department.

The house patients are under the immediate charge of surgical and orthopedic interns, one from each of the three services, who are assigned to the fracture service for a period of three months at a certain stage in their term of service. Each intern is responsible only for the patients on his own section of the fracture service, but he attends the weekly fracture visit, and has the opportunity of following the cases being treated on the other sections of the service. He assists his surgeon in all operations and reductions, treats the ambulatory fracture cases in the emergency ward and looks after the splinting and adjustment of apparatus.

Rates Charged for X-Ray Films

All x-ray examinations are made by the staff of the x-ray department. When the patients can be moved without harm these are made in the central x-ray laboratory of the hospital, but when the patient is being treated by traction or other apparatus, these are made in the wards with a portable x-ray machine. Films may be made whenever necessary and as frequently as desired. They are charged to the patient at the rate of \$5 a film, but if it is necessary to make six or more films at one time, the charge is \$15. When during the course of treatment many films are required, and this applies to the majority of the patients with fractures, the charge is bulked at \$25 for the lot. When the patients are without means, leniency in making the charges is shown. All x-ray films are interpreted by the x-ray department and a written note of their findings is entered in the patient's record. The films are kept in the fracture wards during the patient's stay in the hospital, but it has been found advisable to keep them in a file in the ward office rather than at the bedside.

The number of hospital beds assigned to the fracture service is not fixed, and expansion is permitted according to the needs of the moment. Generally from twenty-five to forty beds are oc-

cupied by patients with fractures all of the time. It is a rule of the hospital never to turn away a patient with a fresh fracture who needs attention. On the other hand, some discrimination is employed in the admission of patients with old complicated fractures who will need to make long stays. The definition of the surgical conditions to be admitted to the fracture service is "fractures or dislocations or complications of such injuries," so that the field is broad and includes such complications as malunion, nonunion, nerve injuries, old infected fractures, recurrent dislocations. A number of such problem cases are referred from other hospitals, and unless some selection were employed in their admission the service could eas-

type of work, and also obtains better team work in the numerous cases where fractures of the skull or facial bones are complicated by other bony injuries.

In the operating rooms special facilities have been provided for the reduction of fractures by closed and open methods. A room has been set apart for the fluoroscopic reduction of fractures and the application of plaster. Curtains have been hung so that it may be darkened. It contains a fracture table which is equipped with an oil immersed x-ray tube. The services of an x-ray technician to assist in this work can be obtained at any time. A full line of special fracture instruments has been provided by the hospital, and

The fracture supply cart is stocked with all supplies ordinarily required for the splinting or treatment of a fracture. The cart is fitted with a hinged top, and is kept locked.



ily become swamped to the detriment of the treatment of fresh fractures for which it is primarily intended. A waiting list is kept in the admitting office of the patients with nonurgent conditions referred from the out-patient department, and these are admitted as beds become vacant.

Fractures of the skull are under the care of a neurosurgeon who is attached to the fracture service. They are admitted to the different sections of the fracture service in the same way as other fractures, and are under the care of the intern on that section, but the treatment of the head injury is directed by the neurosurgeon instead of by the fracture surgeon. In the same way a surgeon of large experience in facial and plastic surgery is attached to the service for the purpose of treating patients with fractures of the mandible and facial bones. This arrangement has proved valuable to the service as it permits the members of the staff to keep in touch with this

these are segregated from the other instruments to ensure that they are used only in clean cases. A graduate nurse who has been specially trained in the technique of fracture operations is available to assist in these procedures. The splint supply room is conveniently located, and any special apparatus that is needed can be supplied quickly.

The department of physical therapy is small and equipped with simple apparatus only. Plans are under way to develop this department. The members of the fracture staff believe in the efficacy of heat, massage and active and passive mobilization in restoring function, and regard long continued treatment by physical therapy as harmful in tending to make the patient rely upon the efforts of others when the cure depends upon himself. When early passive mobilization is indicated this is either performed by one of the surgical staff in person, or the apparatus is so arranged that the patient may perform the movements

himself by pulling on a cord that runs from the overhead frame to the movable part of the splint. The treatment is turned over to physical therapeutic aids only when healing is sufficiently advanced to render this safe. As soon as active mobilization is indicated, active exercises are prescribed to be performed regularly by the patient. From this time all emphasis is placed upon active use and personal effort.

In the out-patient department patients are referred to the department of physical therapy for prescribed treatment, but are required to report to the surgeon every two weeks for examination and change or discontinuance of treatment. Various forms of occupational therapy are taught to the bed patients in the wards, but these are employed more for their psychotherapeutic effect than for specific curative purposes.

In the Out-Patient Department

The fracture clinics in the out-patient department are under the charge of members of the fracture service staff who serve alternately here and in the house. Owing to lack of suitable space and various difficulties of an administrative nature, it has not yet been possible to segregate all patients with fractures in a single clinic. Instead separate rooms have been set aside in the men's and women's surgical and orthopedic clinics for fracture patients. This makes it necessary to divide the patients according to whether they have been treated on the surgical or orthopedic sections of the house fracture service and further to separate the surgical patients on the basis of sex and age, children under twelve being sent to the women's surgical clinic, while beyond that age they are distributed according to sex.

In the fracture clinics of the surgical service members of the staff are on duty every day. Although they are not often the same men that treated the patient in the house, they are generally familiar with the patient from having observed his progress week by week on the fracture visit, and they obtain what additional information is necessary from study of the fracture record, examination of the series of x-ray films and personal consultation with the surgeon who was previously in charge. On the orthopedic side, each surgeon attached to the fracture service holds a follow-up clinic for his house patients regularly one morning each week, and all patients treated by him are requested to report on that day for as long a period as necessary. In this way continuous personal supervision is obtained.

Ambulatory patients who were discharged after treatment in the emergency ward are also sent to the various out-patient fracture clinics under

the same rules that govern the distribution of the house patients. New patients with fresh or old fractures who come directly to the out-patient department without the intermediary of admission to the house or emergency ward are admitted to the men's or women's surgical fracture clinics, but the number of such cases is small.

Unification of the different sections of the fracture service is obtained through the medium of the fracture visit which is held every Friday at 10:30 a.m. It is conducted by the chief surgeon or associate chief, and is attended by the members of the fracture staff and interns. In addition, one or more visiting surgeons often attend. The visit begins in the end result fracture clinic, the functioning of which will be described later. From six to ten patients are usually present in response to the notification from the hospital. Histories and x-rays are inspected and the patients are then carefully examined in respect to residual effects of their injuries and they are demonstrated before the entire staff. Votes are taken on the rating of the end result according to a numerical system. The visit then reviews the end result x-rays of the patients seen at the previous end result clinic; the course of the patient when in the hospital is described; the note of the end result examination is read, and the treatment he received criticized. This frequently gives rise to profitable discussions, often heated but never acrimonious. Following this, patients from the out-patient fracture clinics who present some problem are brought in for consultation. The history of the injury is read and the present condition demonstrated, and after the patient's withdrawal the case is discussed and recommendations as to treatment given.

Free Discussion Is Encouraged

Those in attendance then adjourn to the fracture wards where each case is demonstrated by the intern or surgeon in charge and the x-rays are shown, a large x-ray illuminator fitted with wheels being used for this purpose. In this way all members of the staff see all the cases and profit by each other's experience. Free discussion is encouraged together with criticism and advice, the discussion being held to parliamentary procedure by the chief. Questions most frequently arise about certain cases of incomplete reduction as to whether the alignment of the fracture should be considered satisfactory or whether some further procedure should be attempted, or in other cases whether closed or operative methods of treatment should be employed. The opinion of the fracture staff is finally expressed by a record vote.

(To be continued)

A Method of Filing Diagnoses Adapted to Large or Small Hospitals

By DOROTHY L. KURTZ

Supervisor, Record Department, Presbyterian and Allied Hospitals, New York City

IT IS not necessary that a hospital be large or specialized to be able to profit by our experience in filing diagnoses according to the new "Nomenclature." Those who have come to study the file in person represent a wide variety of institutions, large and small, specialized and general. Their almost uniform comment has been that the general scheme of the file is very simple, and that they can readily see ways of adapting it to their particular needs.

A brief description of the kind of file that we have may help to make clear our set-up under the new system. Beginning with its physical appearance, we use 5 by 3-inch cards ruled to allow space at the top for the name of the diagnosis and its code number. The rest of the card is ruled vertically, dividing the space into three columns. In each column is typed a list of chart numbers, each one followed by the attending's number, "D" for death or "A" for autopsy, if any, the sex and age. Private cases are typed in red, and the cases for each month are headed by the month and year in red. We expect shortly to have in use a scheme by which we can indicate the operations in each case by single digits. The cards of each of our hospitals and the combined out-patient department are distinguished by individual colors.

In the case of the out-patient department we list the chart numbers only, and so have space for four columns. When filing the diagnoses on a case, we enter each term just once in the file. This means we do no cross filing whatever, nor do we distinguish between primary or secondary diagnoses. In this way we keep the file simple and save an unbelievable amount of time. When we get a call for a combination of diseases, which happens seldom, we find it quite easy to compare the two cards and pick out those cases listed on

both. The adoption of the new nomenclature has not changed our general method of filing at all, nor need it that of any other hospital. It simply makes possible a more convenient arrangement of the file, due to the logical plan of the book and the use of a numerical code. When we made the change we did not attempt to convert our old file, but brought it to a close on June 30 and began the new one July 1.

This new file, like the book itself, is divided into the eleven typographic systems. We use buff guides with tabs extending their full width to indicate them. On these are printed both the number and the name, for example, "4 Cardio-Vascular System." Beyond this point we do not follow the order of the book at all. Since, unlike the "Nomenclature," the file has no index, we felt that it should be so arranged that a given term could be filed in one and in only one place. Our previous experience led us to favor an etiologic grouping of the main systems before their division into specific organs. It tends toward a simpler arrangement and is more in line with the majority of calls. Accordingly, each of the eleven typographic systems is subdivided under the thirteen etiologic headings. For this purpose we use small green center tab guides. These bear the number only, since a short acquaintance with the book teaches their meaning, for example, "1" for infections, "4" for traumas.

Under each of these etiologic headings, the

The Presbyterian Hospital, New York City, was one of the institutions selected to try the "Standard Classified Nomenclature of Diseases" before its final revision and publication. It has therefore received many inquiries as to the method of filing diagnoses at that institution and at the hospitals allied with it. The file has been in operation since July, 1932, and Miss Kurtz describes the hospital's experience for the help of other hospitals

cards are arranged numerically according to the code without regard to the hyphen. As these groups of cards become too large to permit the easy location of a term, or when certain organs are particularly important, we insert small buff left position guides. On these the anatomic part of the code number is printed. Thus the infections in the respiratory system will be divided by these guides into those occurring in the nose, the sinuses, the larynx, the trachea, the bronchi, the lungs and the pleura. It will be observed that these small anatomic guides simply make it easier

010-196		RHEUMATIC FEVER	
2/33		4/33	
365151.240	F15	365151.223	F15
738651.219	M15	257113.223	F20
327047.233 D	F21	372140.248	F30
345572.233	F20	369351.244	M16
751620.219	M21	398677.201	F14
3/33		5/33	
318122.215	M18	377263.242	M40
301771.215	M13	377333.235	M13
369148.240	F35	365787.235	M16
345472.212 A	F12	249719.235	F37
354896.246	F19	239519.210	M14

A 5 by 3-inch card, a sample of which is shown above, is used for filing diagnoses.

to find a term, and in no way disturb the order of the cards. As the file grows, more of these will be added and finer divisions made. We also insert specific etiologic guides back of these anatomic ones in certain cases, for example, influenza (-168) and rheumatic fever (-196) behind the body as a whole, and ulcer (-951) behind duodenum.

If then we take the term carcinoma of the stomach (640-889), we look first for system 6-, then for the green etiologic heading -8 and then for the number behind the buff 640- guide. Here will be all of the stomach neoplasms and just before it, those of the esophagus, and behind it those of the intestines. Thus anyone even without the "Nomenclature," if he has the barest idea of the system and knows the code number, may locate a term with certainty. In actual practice a per-

son working on the file daily quickly learns the more important headings. This means that in most references to the file she does not need the exact code. The term alone gives its approximate location, and she can find it definitely by the name typed at the top of the card.

The supplementary terms are filed in numerical order behind special guides at the end of their respective systems. We have given the nondiagnostic terms the initial digit Y instead of O and filed them at the end. We do not use the supplementary obstetric list as given, but since these cases are more homogeneous than any other large group, we do take some short cuts in entering them. All deliveries are entered on one of the abortion, premature or term birth cards. Then after the usual data we add certain descriptive items common to all these cases, such as the parity, type of pelvis, presentation, kind of delivery. These items have simple codes and each one has a specific column on the card. In this way we group together closely related data which otherwise would be widely scattered throughout the diagnostic and supplementary files. This makes the reference easier and saves time in entering these cases.

The cost of setting up such a file is small and need not all be met at once. It is convenient to have the eleven system guides and the 143 (11 by 13-inch) etiologic guides permanent to start with, but it is surely not a necessity. Cheap blank ones can be bought or even made from cards of two different colors. As for the minor anatomic guides, with the exception of those for important organs, it is hard to tell in advance what ones will be required. So for these, it is really a wiser plan to add temporary ones as needed and to delay the ordering of permanent ones until the file has been running for some time.

Since we started, we have made a number of changes in the details of the file to fit it more closely to our own needs, and as we become more familiar with its possibilities we shall probably make many others. The general lay-out of the file, however, we have never wanted to change.

What Is the Answer?

A challenging question is raised in the annual report of the Vanderbilt Clinic, New York City. Dr. Frederick MacCurdy, superintendent of the clinic, says:

"During the last two or three years there has been, because of general conditions, a heavy trend of patients away from the offices of the practitioners and a heavy increase in the amount of ambulatory care demanded of and given by hospitals and their out-patient departments. What influence on our social adjustment will this have, even though we again become economically adjusted?

"These patients are learning in the better organized out-patient departments the possibilities of group practice and discovering the inadequacies of the lower priced private care which is hampered by lack of facilities and equipment. Will this trend away from the family physician, especially in the lower brackets, be reversed with economic improvement or will the out-patient department find that community usefulness lies in the direction of assistance to the patient and practitioner through emphasis on diagnosis rather than through unnecessary routine care and treatment? Taking our institution as an example it might be interesting to study this trend."



A Tramp Abroad in the Hospital Field—Part III

By

A. G. STEPHENSON

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This is the third of a series of articles on European hospitals. In the May MODERN HOSPITAL Mr. Stephenson recorded his impressions of Holland, France and Switzerland, while hospitals of Italy, Austria and Munich, Germany, were described in the August issue. This article continues the discussion of German institutions

THE Germans have studied the theory of dietetics for years but it appears that nowhere has this science been so highly specialized as in America. In many parts of the Continent there are special diet kitchens and separate Jewish kitchens but their procedure is much simpler than that observed in America. Later I shall describe a typical German kitchen, but here let me say that in multistoried hospitals the kitchens are now frequently put on top of the buildings without any sufficient reason. Wherever it is possible they are housed in separate buildings.

The food is wheeled in ponderous trucks to large ward pantries where it is reheated or placed in hot presses or bains-marie. These trucks are often heated with a pan of charcoal that smolders to a white ash and gives forth no smoke. This method is used extensively in England, too, the charcoal being purchased in bulk from the region of Munich. I do not think this method is as good as electricity. It is claimed, however, that food is not dried up by charcoal and of course it is much cheaper to build carriers for charcoal heating than for electric elements. Food is often served direct from

the large trolleys to the patients in the wards, each dish being served separately. But to this I shall refer later.

Whenever it is possible, German hospitals buy steam from a city power house used for generating current or from some similar source. Hence we often find great economy in this department. Again I would stress that in the combining of services great economy is possible and it is in this direction we can benefit, I think, from the Continental viewpoint.

Children's Hospital Called Extravagant

The wonderfully beautiful Childrens Hospital was built in 1928. Wards were constructed so that patients could be nursed in self-contained units. The wards for grown children usually have four beds. These wards are divided by partitions, glass to the ceiling above a marble shelf at table top height, beneath which are individual cupboards for complete nursing equipment. Between each two wards is a complete utility room and bathroom for the nursery service. For babies the procedure is somewhat the same insofar as bathing facilities are concerned, but the babies' cupboards are on the corridors and all changes of linen, all dressings and all supplies brought from an outside source—except food, of course—are placed in the cupboards which open on to the corridor and into the room as well.

Much criticism has been leveled at this hospital

as an extravagant scheme but the fact remains that the pediatrician can justify completely the whole scheme for his results apparently demonstrate the advantage of decentralized nursery facilities between the wards. This hospital has a special training school for nurses which is somewhat American in its equipment and its facilities for demonstration. I wondered if the noticeably sympathetic and understanding attitude of the nurses toward the little patients was the reflection of some phase of their training, if it was a purely natural instinct or if it was a reaction to the beautiful setting and nursing conditions.

The Munich medical school has a great reputation in Germany and large sums of money have been spent recently on a new dermatology and syphilis hospital, a pathology institute and a women's hospital. Except for the first mentioned, the Schwabing Hospital is completely self-contained as a teaching hospital.

I should explain here that it is compulsory throughout Germany to be insured if an individual earns 300 marks or less a month, that is, normally, about \$75. His hospitalization is then paid for as a ward or third class patient. He does not pay his doctor's fees but a second or first class patient is required to do so.

Each municipality is obliged to budget for grants to its hospitals and this is brought about largely by the proportion of patients who cannot pay at all. At a typical small town hospital at



The Schwabing Hospital, Munich, built before the war, typifies the pavilion type of the period—miles of corridors!



The boiler room, laundry and kitchen are housed in this building at Bambeck Hospital, Hamburg. The huge tower is used for water storage.

Waiblingen, about twenty miles outside of Stuttgart, the costs for the first half of 1932 were as follows: Third class patients, 4 marks per day; second class patients, 6 marks per day; first class patients, 8-1/5 marks per day. Normally these figures would approximate 90 cents, \$1.25 and \$1.70. The hospital contains only 100 beds but the municipality is obliged to levy a special rate of approximately 20,000 marks—about \$5,000—per year to cover its maintenance.

This little hospital is one of the principal surgical clinics in the south of Germany. A new terrace type of hospital has been built and patients may be wheeled through the great sliding window sashes of their rooms on to the open terrace on each of the three floor levels. The sashes extend almost the full width of the walls of the two-bed wards.

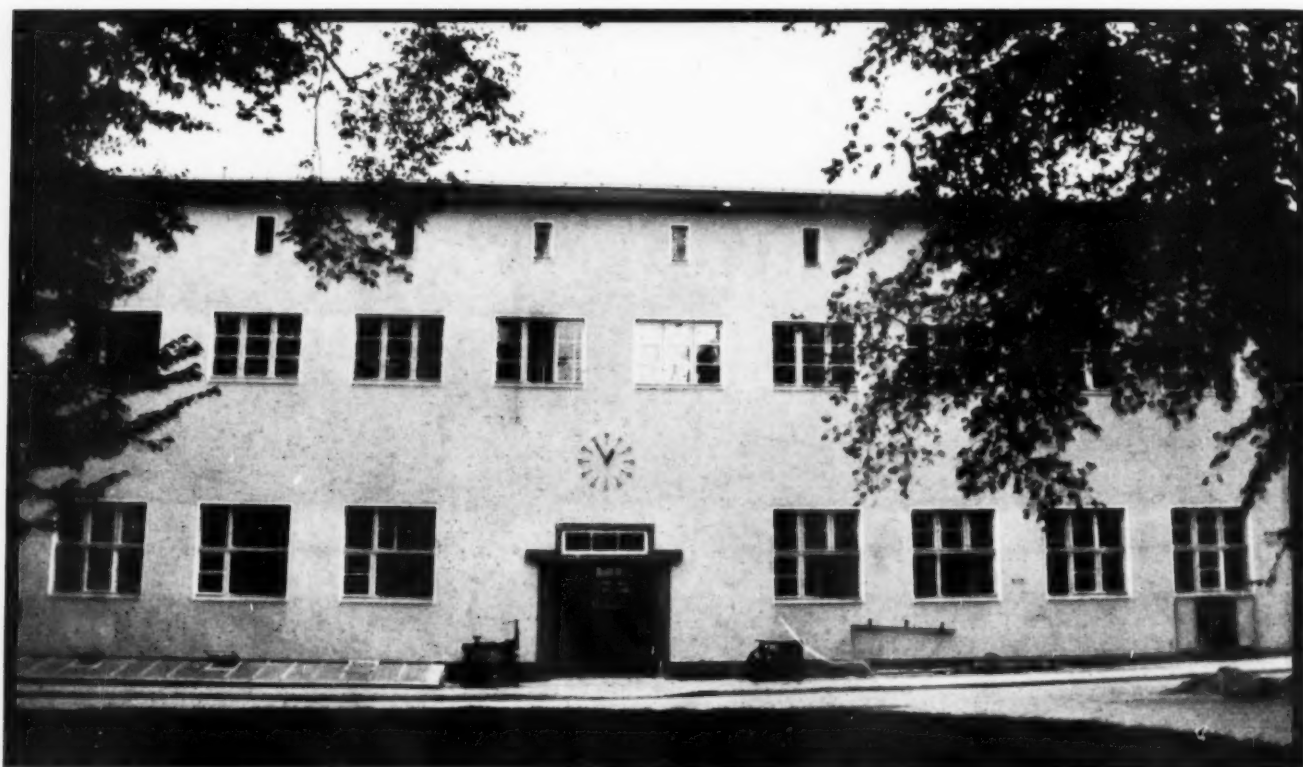
Such a hospital is expensive to build since only one side is used for patients. The corridor runs along the outside wall and connects with all the utility rooms. It is an extremely attractive way to build and if it can be proved, as Germans of the open air school contend, that patients generally benefit by such treatment, then we may well study such plans.

Very few completely new hospitals have been built in Germany since the War. The greatest large public institution was undertaken at Freiburg

I. B., and I shall describe its outstanding features. It will be easy to distinguish the lines of development which differ vitally from such schemes in America. In the first place, it is planned to house 1,250 beds. Its present capacity is 700 and this does not include children's, gynecologic and maternity sections, the construction of which is to follow.

The hospital is definitely built on a pavilion plan although wards are linked together by great corridors. Each section is clearly defined and has a separate entrance for surgery and medicine. Three hundred beds for each department are provided. The buildings are four stories high with quarters for staff and nurses on the top floor. Nursing provided by the St. Vincent's Order of Nuns is extremely efficient. The large physiotherapy department is used extensively to treat outpatients as well as in-patients. That the Germans lean toward this form of treatment is evidenced by the fact that they have spent large sums in planning and equipping gymnasiums and in providing facilities for hydrotherapy, light treatment, vapor baths and all forms of mud baths. I saw many such baths in all the countries in Europe and I wonder whether it is not more than a craze or fashion and whether it will not spread to other parts of the world.

On each floor for each department there are two



Many improvements have been made recently at the General Hospital, Stettin, Germany.

sixteen-bed wards, the remainder being made up in single two-bed and four-bed units. The Germans maintain that there is still great virtue in having a few large open wards and the patients are classified in these wards so that they will benefit from rather than be disturbed by the close association with other patients. Infectious cases are enclosed within a high brick wall. The enclosure is connected to the main hospital by a covered way. Each ward holds two beds and these can be pushed out on the open glass roofed terrace.

Kitchens Are Beautifully Equipped

Operating rooms, like most of the departments, are spacious. An effort has been made to keep walls entirely free of cupboards. They are plain tiled surfaces with the usual access to the sterilizing room over the utensil sterilizers which are screened by a sliding plate glass sash. Ceilings slope three feet from their highest point at the head of the window to the wall. The experiment was made to improve the reflection value of the ceiling and it has apparently succeeded.

The kitchens, large and airy, are beautifully equipped and give the visitor an impression of extreme efficiency. There is nothing original in the storage departments or the plan but details are original. For instance, all vehicles entering for delivery must go over a weighbridge which records electrically in the office. The food is enclosed in electrically heated and driven cars. The

driver stands in front very much like drivers of cargo and luggage carriers used on wharves. The cars are docked and loaded at the dispatch dock and are rapidly driven to the various lifts in the tunnels. There are eight of these trucks in constant use.

The kitchen is a single story building with walls 20 feet high. Windows are placed high in the walls. Ventilation is accomplished by means of inlet openings 2 inches wide in long strips 15 feet up the walls. There are no hoods over stoves or steamers. The Germans use many boiling kettles and it is not uncommon to see a dozen of them on the floor, ranging from 50 liters to 200. Steam is exhausted by convenient flues that project to a height of about 4½ feet. By this means the whole area is kept free of obstruction and the general view of this as of most modern German kitchens is pleasing, clean, orderly and businesslike.

I do not think that Continental hospital kitchens have as many gadgets as American kitchens, that is, automatic toasters, egg boilers and coffee urns. Coffee is always made in large steam kettles. But the Germans have more effective steaming and boiling equipment. It is invariably of white or pale green enamel bound with rustless steel and it is most effective. Floors are similar to American kitchen floors. They are often finished in white vitreous tile with wide black joints. Where the kitchens have low ceilings, hot pipes frequently are arranged over them so that a constant temper-



This 100-bed hospital was erected recently in Nürnberg, Germany, to care for tuberculous patients.

ature is maintained in order to avoid condensation which is so often a cause for complaint in American kitchens.

The laundry for this hospital has electrically driven machinery but in my opinion modern American laundries are more scientifically planned and as a rule the finishing machinery is better.

Generally speaking, from a construction point of view, modern German hospitals are expensive. They do not use the quantity of sound absorption that is used in America but invariably the partition walls are double and the space between is packed with 11½ inches of sound absorbent material. Double doors and windows are used in all first and second class rooms. One door invariably opens on to the corridor. If it is not practical to use two window sashes, single ones are double glazed. Rubber floor coverings finished with terrazzo or composition base are frequently used. More often the finish is good quality linoleum laid on mastic.

If the Germans excel in their kitchens, this is equally true or more so insofar as their x-ray and deep therapy departments are concerned. They have great respect for American equipment for fluoroscopy but in all else their departments seem to be on more individualistic lines. For example, their deep therapy machines, I should say, are superior to any others in the world. At any rate they appear to be far more adaptable.

It may be that the use of radium is not so general

in Germany as in most other countries. German hospitals cannot afford to buy large quantities of it so they have concentrated on these machines with remarkable results. At Frankfurt A. M., the famous x-ray and deep therapy department of Professor Doctor Holfelder is an outstanding instance. Here we find not only extremely capable planning and design but also an arrangement of the machinery that is decidedly in advance of any found in such departments that I have seen in America. In the first place, Professor Holfelder appears to have invented the canon principle of carrying the tube and this is so easily manipulated that only the least possible exertion is necessary to adjust the equipment to the patient in any position. The principle is being widely developed on the Continent now. The finish of the equipment is most attractive.

Many Disagree With the Professor

Rarely is any voltage in excess of 200,000 used, in fact, there is to my knowledge only one machine of 700,000 volts in use in Germany and that is in the Charité in Berlin. Apart from the expense involved in the manufacture and use of the valves for such voltages, the application of such power involves problems in physics which puts it out of the range of ordinary use. At the Charité the ray is emitted from underneath the floor, the patient being laid in a minutely adjusted lead casket, which as yet must be adapted to the ray which is the reverse of the canon principle.

All deep therapy apparatus is entirely shock-proof. Walls of the treatment rooms are not protected with lead except in an elliptical form under the couch. The canon, however, is heavily insulated and the control stands outside the rooms are protected with lead and are provided with lead glass overlapping screens to allow easy conversation between the operators and a physician in the room, if such is necessary.

Of course what Professor Holfelder states he has proved to be the case is roundly disproved and criticized by other professors in Germany, but the fact remains that he has reduced his voltages from 250,000 to 200,000 for he has proved that extra compression is of more value than extra voltage over and above the latter figure. The exact application of the ray is, he contends, the secret of success. Hence the development of his canon.

Light is another strong point with the professor and consequently in all his treatment rooms the walls are of prismatic glass. Ceilings are only about 10½ feet high but there is no machinery in them and consequently they are airy, light and comfortable. The rooms can all be darkened, if required, the electrical controls being placed at the operator's desk outside the rooms. In the professor's room on the first floor and in the central bureau below an indicator board shows by a series of lights all the rooms that are in operation. These

are automatically cut out when the machines are not in use. This system applies to all the diagnostic as well as deep therapy machines and is regarded as extremely valuable in the operation of this enormous department.

The Stadtisches Krankenhaus is the home of this remarkably fine department. It is an old time hospital built on the pavilion plan. This x-ray building, however, is comparatively new and has exercised a profound influence in such departments even outside Germany. The director of the hospital and one of the influential figures in the German hospital world is Dr. I. Wirth. He was a Prussian army officer who at the end of the War held high rank in the German Red Cross. He has specialized in administrative problems. He has a great admiration for the American system of controlling large institutions by medically trained administrators and predicts that the tendency now is to encourage medical men to specialize in this phase.

In Germany it is the rule to have a medical chief and an administrative chief. This frequently gives rise to difficulties, no matter how eager both parties are to avoid them. There are 1,850 beds in this hospital. Formerly there were some 300 classified beds in first and second classes. The communists objected strongly to this class distinction so that now such patients are regarded as private cases of the various professors on the staff.

Colorado Psychopathic Hospital Adopts Three New Projects

The rôle of hostess to new patients admitted to the Colorado Psychopathic Hospital, Denver, is assigned to a graduate nurse with postgraduate training in psychiatric nursing. The hostess introduces each new patient, unless he is particularly disturbed, to the ward nurses, shows him about the hospital and explains hospital routine and treatment. She visits the new patient daily for ten days, noting any point that may be of value to the doctors in their treatment of the case. The hostess also meets the patient's relatives and explains hospital routine and regulations.

Nurses at this hospital, according to the *Bulletin of the American Nurses' Association*, receive a course of twenty lectures in recreational therapy. The instructor teaches tennis, physical exercises and games to nurses and patients, wisely grouping the patients according to their capabilities. She and some of the nurses are present at meal times, occasionally eating with the patients to stimulate lagging appetites and conversation. The nurses carry the load of the recreational program, which permits its director to give time to individual patients who do not fit readily into groups.

Another interesting feature of the hospital is its open wards. Two wards with outside entrances are given over to men and women considered by doctors and nurses as capable of getting along without constant supervision.

From 8 a.m. until 5 p.m. these patients may leave the hospital unaccompanied. They note in the register their names, where they plan to go and when they expect to return. They must be in on time for meals and treatments. The open wards have been in operation for over a year, and the psychological effect is excellent, according to Louise Kieninger, director of nursing.

What Is Occupational Therapy?

In order that no confusion may arise as to the meaning of occupational therapy, a clear understanding of its objects and aims is necessary. The definition of occupational therapy as given by the Boston School of Occupational Therapy is, in the opinion of Dr. Harry J. Schott, Los Angeles, probably as inclusive as any that has been attempted. It is as follows:

"Occupational therapy aims to furnish a scheme of scientifically arranged activities which will give to one set of muscles or related parts of the body, in cases of disease or injury, just the degree of movement or exercise that may be directed by a competent physician or surgeon, stimulating heart action, respiration and blood circulation accurately as prescribed, and at the same time yielding some of the joy and satisfaction that wisely selected wholesome occupation provides in normal life. Thus it takes its place with nursing, medicine and surgery, as one of the important departments of the medical art."

The General Hospital Welcomes the Tuberculous Patient

By HENRY D. CHADWICK, M.D.

Commissioner of Health of Massachusetts, formerly of the Department of Health, Detroit

THE tuberculous patient who was wantonly abandoned by the hospitals fifty years ago and was suffered to live only in the almshouse has now come into his estate. He is requesting no favors. On the contrary he is in a position to give aid to the general hospital in the present emergency. Some of the general hospitals are now making overtures and gratefully accepting tuberculous patients at reduced rates. The many vacant beds may have furnished the motive, but whatever the reason the effect will be beneficial both to the hospital and to the cause of public health.

What has brought about this change in viewpoint? The answer is that treatment of tuberculosis has been revolutionized and phthisiophobia has subsided.

The modern method of treatment of tuberculosis requires strict bed rest and good nursing for weeks and months and sometimes for years. It is the same kind of care given the acutely ill in the hospitals but continued over a longer period of time. Mountain air is no longer considered essential. Climatic conditions of a special nature are not required. The cure of tuberculosis takes place in every state and at all elevations and under all climates.

Service of Consulting Staff Needed

The cornerstone of treatment is rest. Rest for the body is obtained by lying in bed. This is supplemented by rest of the diseased part obtained by splinting the tuberculous lung with an air cushion, as is done with artificial pneumothorax, or further restricting the expansion of the lung by reducing the thoracic space, as is done when the phrenic nerve is removed to stop movement of the diaphragm (phrenicectomy), or by resection of the ribs (thoracoplasty) in certain cases. All these newer active therapeutic measures can best be done in an institution of the modern hospital type where thoracic surgeons, skilled nursing and operating rooms are available.

The service of different members of a consulting staff are frequently needed. A tuberculous patient has a chronic disease often lasting years, and during this time is subject to all the other ills that

afflict mankind. Treatment for these associated diseases is of prime importance as an adjunct to the care of the tuberculosis.

The general hospital can fill an important place in the tuberculosis field in many localities where there are not enough sanatorium beds or where these institutions are without operating room facilities. There are many such areas in the country. It has been impossible in most states to build enough institutions to provide sufficient beds to care for all the cases of tuberculosis that require treatment. On the other hand, the hospitals at this time have many vacant beds and could set aside a section for the care of tuberculous patients now on the waiting list and clamoring for admission. No one knows how long the present condition will continue in the general hospitals, but during this period, whatever its duration, the vacant beds could be filled with tuberculous cases to the advantage of both the institution and the patient.

Method of Treating Tuberculosis in Detroit

When business resumes its normal trend and patients again fill the hospitals, the tuberculous cases could be discharged or additional wards built for their care. The demand for beds in institutions caring for tuberculous patients is greatly increased during periods of business depression. Furthermore, it is widely recognized that modern treatment of tuberculosis cannot be carried out so effectually at home as in a sanatorium. Most physicians when they make a diagnosis of tuberculosis immediately advise sanatorium care, and the people at large have been educated to expect such treatment for those afflicted with that disease. The state laws and city ordinances provide for the care of communicable disease, and tuberculosis is rightfully included in this group.

One bed per tuberculosis death was the ratio formerly considered desirable, but this has been shown to be inadequate in the populous centers. In Detroit the department of health always had a waiting list pathetically long until a little over a year ago when the facilities which had gradually been increased reached the equivalent of two beds

per death. Since then applicants for sanatorium care have been admitted without delay.

The city owns two institutions for the care of tuberculous patients, and both are under the control of the department of health. One of them, the tuberculosis unit of the Herman Kiefer Hospital, was opened about three years ago and accommodates 670 patients. The other is a sanatorium situated twenty-five miles out of the city at Northville, with a capacity of 830 beds. The hospital is a seven-story fireproof building planned on the lines of a general hospital. The patients are in one-bed or two-bed rooms, and all have tray service. On the seventh floor there are two well equipped operating rooms and a heliotherapy department. The building serves as a receiving hospital for all forms of tuberculosis. On the first floor are the business offices, the city laboratories, the center of the school nursing service and the out-patient chest clinic. This diagnostic clinic is open every weekday and is the only one maintained by the health department. The field nursing service which supervises the tuberculous patients in their homes is directed from this clinic.

The patients are admitted to the hospital and are given as strict bed treatment as would be observed in any hospital for acute diseases. After the examination and laboratory study have been completed each case is brought up in conference attended by the whole medical staff. Diagnosis and classification of the type of disease are made and the form of treatment decided upon. Collapse therapy of some kind, such as pneumothorax or phrenic nerve surgery, is used to supplement the bed rest that all patients receive. These measures are instituted at once in the great majority of cases. The exceptions are the few patients that have a minimal lesion where activity of the disease may be questionable and the far advanced cases where the disease has become so generalized that operative measures of any kind would be a useless procedure. Later if the collapse therapy measures mentioned are ineffectual thoracoplasty may be decided upon.

After a period of observation and treatment in the hospital the more favorable cases are transferred to the sanatorium at Northville. In these two institutions with 1,500 beds, 72 per cent of the adult patients are now receiving collapse therapy of some kind.

General Hospitals Have Proper Facilities

General hospitals have the facilities to carry out such treatment as I have outlined, but most of them lack a medical and surgical personnel trained in the modern treatment of pulmonary tuberculosis. With the development of sanatorium treatment and the introduction of collapse therapy more and

more cases of tuberculosis have been turned over to the specialist. Most of these physicians receive the compensation which enables them to live from the city or state through the institution with which they are connected and not from the patients. Tuberculosis is a disease of long duration. It has acute exacerbations but runs such a chronic course that savings are soon exhausted and the earning power of the patients lessens or ceases altogether. As these are cases of communicable disease their treatment and maintenance must be borne by the public to a great extent, especially in periods of unemployment and reduced incomes.

Few Patients Are Able to Pay for Treatment

The situation in Detroit is probably similar to that in other municipalities in this regard. Of the total cases of tuberculosis on the register, 2,131 are hospitalized, 3,153 are under the supervision of the clinic physicians in their homes, and but 264 (4 per cent) are under the care of a private physician. Of the cases under sanatorium and hospital treatment less than 10 per cent are found by the investigators of the county auditor's office to be able to pay even a small part of their maintenance cost. The victims of tuberculosis will continue to be a major public health problem until the disease ceases to occupy a place among the leading causes of death.

The general hospital can be of great help in this problem. In a paper read before the National Tuberculosis Association in 1931 by Dr. Arthur T. Laird and Dr. Roy M. Mayne, Nopeming County Sanatorium, Nopeming, Minn., on "Treating Tuberculosis in General Hospitals" the authors report that their sanatorium has an affiliation with St. Luke's Hospital and St. Mary's Hospital, Duluth, Minn., and over one thousand cases of pulmonary tuberculosis have been admitted to the tuberculosis departments of these hospitals during the past six years. A large proportion of the patients at the Nopeming County Sanatorium have first been studied at one of these hospitals. A member of the sanatorium staff visits the patients in these hospitals daily. The hospitals' resources for treatment are freely drawn upon, and the members of the staff are available for consultation and general and thoracic surgery.

In Detroit another plan is carried out. There the city maintains a large receiving hospital and sanatorium for tuberculous cases, but it was necessary to subsidize several private sanatoriums as not enough beds were available and the waiting list continued to grow. Many times cases favorable for treatment when first diagnosed became hopeless by the time their turn came for admission. To their aid came an offer from the general hospitals.

Three of the largest in the city and several of the smaller ones agreed to accept cases of tuberculosis. In normal times these hospitals were filled, and they refused to accept such cases but now they had many vacant beds. The amount paid by the county, although smaller than the established hospital rates, served to reduce the overhead and therefore was financially advantageous. Their cooperation was gratefully accepted, and we have now enough available beds to hospitalize all patients as soon as applications are made.

The same standard of treatment is maintained in these general hospitals as in the tuberculosis institutions. This is brought about by the chief of the tuberculosis service of the health department attending conferences with the staff physicians in charge of the tuberculous cases in the affiliated hospitals. It was necessary for some of the hospitals to add to their staff a physician skilled in pneumothorax to administer that form of treatment. The cases requiring phrenic nerve surgery or thoracoplasty are transferred to the Herman Kiefer Hospital if the hospital in which the patients are being treated is not equipped for such operations.

There are obvious advantages in these arrangements. Additional beds can at once be made available so that patients can be given care and treatment promptly. The public is protected from infection by the segregation of cases which otherwise would spread the disease.

Tuberculosis Often Not Recognized

Objection may be raised to taking patients with an infectious disease into a general hospital. Will the doctors, nurses, attendants and other patients contract tuberculosis as a result of such exposure? Prof. H. W. Hill in an article in *Hospital Management*, April, 1927, points out "that at least one-third of the general run of hospital patients develop some form of infectiveness in some degree, sooner or later. Therefore the ordinary patient, regardless of the purpose for which he is ostensibly admitted, should be considered at least potentially infectious until he is proved not to be, rather than the converse. Therefore, every medical and especially every nursing student should be taught from the first to be constantly on guard against such possible—rather, probable—infectiveness, throughout the whole period of the patient's stay in the hospital. Especially should every patient admitted be carefully examined for tuberculosis, as well as for any other infection, acute or chronic."

Cases of tuberculosis are constantly being admitted to hospitals and receiving treatment for associated conditions. Most of these patients are unaware of their tuberculosis, and the disease is

often unrecognized by their physicians who are intent on treating the more obvious condition, be it disease or injury. Tuberculosis is often masked by other concurrent diseases or simulates other conditions and remains undetected. During this time all who share in the care of the patient are unsuspecting, and therefore precautions against infection are not imposed upon the patient or observed by others. That this danger is real and that infection does occur is shown by the frequency with which nurses, medical students and interns contract tuberculosis in general hospitals.

The Incidence of Infection Among Nurses

Dr. Bruce H. Douglas reports that at the William H. Maybury Sanatorium, Northville, Mich., of which he is superintendent, during the past ten years seventeen employees have developed tuberculosis. Three of these had been diagnosed previously. Five had pleural effusion, ten minimal and two moderately advanced pulmonary tuberculosis. Two were physicians, six, nurses, five, dining room attendants, three, porters and one was a housemaid who had no direct contact with patients. All have recovered except one now under treatment. The fourteen, excluding the three ex-patients, were supposedly healthy at the time of employment. This makes an incidence of tuberculosis of 1.4 cases, or .53 per cent, among an annual average number of employees of 261. This is less than the estimated morbidity for tuberculosis in the general adult population. G. J. Drolet estimates the tuberculosis morbidity in New York to be about .75 per cent for male adults and about .5 per cent for female adults.

A study has been made of the incidence of tuberculous infection among nurses in training in the Detroit hospitals. In 1930, 254 nurses in the entering classes of seven general hospitals were given a tuberculin test and a roentgenogram of the chest. Of those nurses 37.7 per cent reacted positively to the tuberculin test and 62.3 per cent negatively. Three students, or 1.1 per cent, were found to have pulmonary tuberculosis as revealed by roentgenogram. This is a significant finding, as these students had all been subjected to the usual physical examinations and had been accepted as free from disease. In 1931, at the end of the first year of training, 117 of these same students were tuberculin tested, and 57 per cent reacted, showing a 20 per cent increase in infection. One of the students was found to have developed pulmonary tuberculosis. This case would not have been discovered at this time without a roentgenogram.

From the available information it is clear that tuberculosis occurs among nurses with too great frequency and that regardless of the efforts made to keep tuberculous patients out of hospitals they

are admitted and spread infection. It is also true that healthy employees of sanatoriums rarely develop tuberculosis during their period of service. That is the opinion expressed by many sanatorium physicians.

We must differentiate between tuberculous infection as revealed by the tuberculin test and manifest pulmonary disease as shown by roentgenogram. Whether tuberculosis develops in an infected individual depends on three major factors—the resistance of the individual to tuberculosis, the number of bacilli and the frequency with which they are taken into the body and the virulence of the bacillus. We can do something to influence the first two factors. Precautions can be taken by the nurses and physicians and observed by the patient which will do much to lessen the danger of serious infection if the cases of tuberculosis are recognized as such.

General Hospitals Must Take Proper Precautions

The ventilation of sanatoriums obtained by open wards and porches is more nearly adequate and more effective in diluting the number of tubercle bacilli that may be floating about in dust particles than it is in hospitals with their more complicated system of indirect ventilation. The air of sanatorium wards is noticeably fresher than that found as a rule in a general hospital. The sanatorium patients are taught to cover their mouths when coughing, and therefore fewer bacilli are scattered about. Sunlight, the most valuable of all disinfectants, is allowed access to the sanatorium wards to a greater degree than in a hospital. Because of these favorable conditions under which employees of sanatoriums carry on their work the amount of infection is minimized and the resistance to tuberculosis inherent in the individual is maintained or improved. In a sanatorium both the patients and the attendants know that they are dealing with a communicable disease. The patient is taught to keep the mouth covered when coughing, and receptacles are convenient for the disposal of sputum. In the general hospital tuberculous cases are often undiagnosed, therefore are not considered infectious and no precautions are taken. That is the essential difference between the two types of institutions and it is a valid reason why it is more hazardous as far as contracting tuberculosis is concerned to work in the ward of a general hospital than in a sanatorium.

The remedy does not lie in excluding cases of tuberculosis from the hospital, but the cases of tuberculosis that are cared for must be brought into the open so that precautions may be taken to prevent the spread of infection. This may be done by finding out as soon as possible after a patient is

admitted whether he has tuberculosis, either as a principal disease or an associated condition. This should be done whether the case is placed in the medical or surgical service.

It is a conservative statement to say that physicians who depend on physical examination alone will be wrong in 25 per cent of the cases. Some that have no disease will be called tuberculous, and many more that have tuberculosis will be passed as free from that disease. The only way to detect all tuberculous cases is with the x-ray and examination of the sputum. Physical examination of the chest is of secondary importance, as by it most early cases of tuberculosis and many of those that are more advanced will be missed.

The expense for films when not paid by the patient should be borne by the hospital. The hospital maintains an x-ray department, and the cost of a single film, which is usually sufficient for diagnosis, is only sixty cents. If only to guard against spreading tuberculosis this expense is justified. Cultures of nose and throat are taken routinely to guard against diphtheria carriers. Examination should also be made of sputum from all patients from whom it can be obtained, to guard against the person who is the carrier of tubercle bacilli and unwittingly sprays them over the unsuspecting attendants. With the roentgenogram and the laboratory test of the sputum all infectious cases of pulmonary tuberculosis can be promptly found.

Gauze Masks Should Not Be Worn

The aseptic technique used in cases of acute infectious disease should be carried out in the care of the tuberculous patient. At the Herman Kiefer Hospital tuberculosis unit the nurses wear a short-sleeved uniform or have their sleeves rolled up to the elbow. A gown is worn over the uniform when the nurse is giving bedside care to the patient, and following such a service abundant washing of the hands in soap and water is required. Gauze masks should not be worn, as they may serve to convey infection to the wearer instead of preventing it. An important thing is to educate the patient to cover his mouth when coughing. The use of paper napkins and covered receptacles for sputum disposal is also desirable.

The doctors, nurses and other hospital employees may have tuberculosis, and for that reason they should have an annual roentgenogram of the chest as a routine procedure. If patients and employees are examined as suggested and those with tuberculosis obliged to carry out the necessary precautions the general hospital will become as safe a place to work in as is the sanatorium.¹

¹Read at the meeting of the American Hospital Association, Detroit, September, 1922.

Million-Volt X-Ray Equipment Installed at Cancer Clinic

By ROSCOE L. SMITH, M.D.

Lincoln, Neb.

WHEN the officials of Lincoln General Hospital, Lincoln, Neb., planned a new five-story addition to be equipped as a modern cancer clinic, they designed the basement and first floor especially to house one of the world's largest constant potential x-ray machines for the treatment of malignant lesions.

Transforming equipment with a capacity of approximately 1,000,000 volts and a giant x-ray tube that will deliver more radiant energy of the radium type than the world's supply of the element, occupy half of the basement and half of the first floor. Every known scientific means of protection has been employed to make this equipment safer and more accurately controlled than any heretofore constructed.

The treatment room is underground and affords ample protection. The room is 14 feet square with a maximum capacity of three patients. The walls are cast of concrete and are two feet thick. The roof of the treatment room is covered with sheet lead one inch thick and weighs approximately seven tons. This special construction prevents any stray radiation and ensures absolute safety.

At the center of the treatment room and above the ceiling is mounted the x-ray tube. The tube, a new departure from the old conventional type of glass tube, is cast porcelain. It weighs 11½ tons and is 10 feet in length. Every

safety device is utilized to obviate danger of electrical shocks or harmful contacts. An elaborate system for the cooling of the tube during its operation is required. The purchase price of the new tube was approximately \$3,000 as compared to \$260, the cost of old type x-ray tubes.

The treatment room is reached by means of a labyrinth tunnel passage. This arrangement prevents the entrance of x-ray into any portion of the hospital building. During a treatment the patient is made comfortable on a couch or in an easy chair and at no time is he placed within several feet of the x-ray tube. A copper cone directs the beam of x-ray to the desired location on the patient's body prearranged by the radiologist in charge. Any size area may be treated.

A large mirrored periscope connects the treatment room with the control room. The latter unit, 9 feet wide by 15½ feet long, contains all of the control equipment used in connection with the x-ray treatment. By means of the periscope, which is placed at an angle in the thick concrete wall, the



The transformer room is adjacent to the treatment and control rooms. It contains seven large transformers having a million-volt capacity.

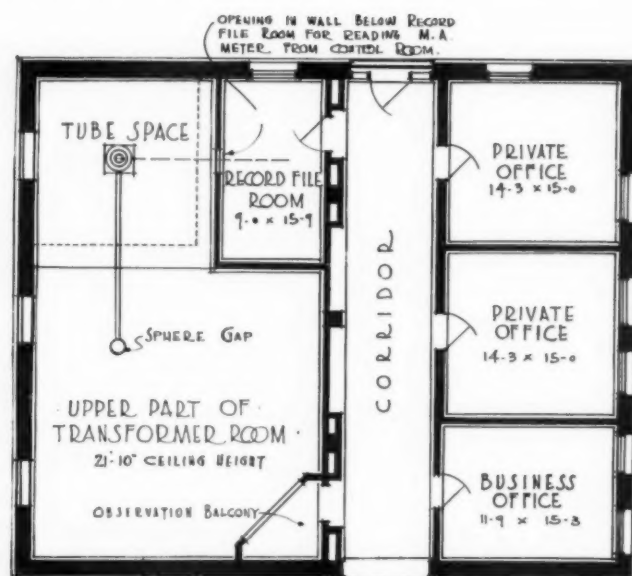
operator may stand in the control room and view the interior of the treatment room without receiving the effects of the x-ray. There is also an opening from the control room to the tube space over the treatment room, allowing the operator to read the instruments in connection with the x-ray tube.

While the patient is undergoing treatment, the physicist in charge of the equipment remains in the control room with the control mechanism in constant view. The most delicate instruments are used to measure accurately the exact amount of radiation that enters the patient. These instruments are constantly reading and designate the correct status of the treatment at every moment. A microphone and a loud speaker enable the operator and the patient to converse at will.

Every door is equipped with a safety switch so that the opening of a door automatically closes off the primary current and a 10-foot switch on the tube level contacts and grounds the transformers.

Air is brought to the treatment room from the outside through a duct by a suction fan and is drawn over a cooler or a heater, depending on the weather. Patients are thus assured of fresh air.

Adjacent to the treatment and control rooms is the two-story transformer room, 25 feet square and almost 22 feet high, in which are installed the seven large transformers with their million-volt capacity for use at the x-ray tube. The transformers are stepped up in a spiral manner to the x-ray tube directly above the treatment room. They are mounted on porcelain insulating posts of varying heights. The top of the last transformer directly under the sphere gap is approximately nine feet above the floor. The average weight of the transformers is $11\frac{1}{2}$ tons. Electric current travels from the control board to the x-ray tube by way of the



cascading transformers through seventy-five miles of copper wire.

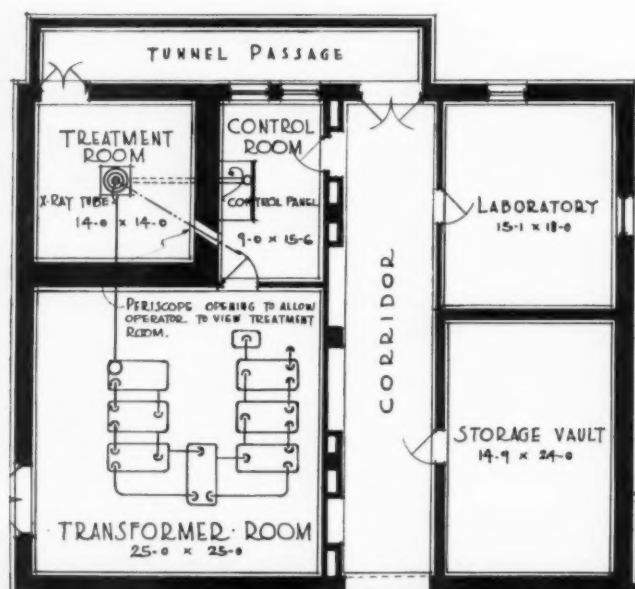
In addition to the major features of the ground floor, there is a laboratory space 15 feet by 18 feet and a storage vault $14\frac{3}{4}$ feet by 24 feet, with an 8-foot corridor the length of the ground floor.

The first floor of the x-ray therapy department includes a business office $11\frac{3}{4}$ feet by $15\frac{1}{4}$ feet and two private offices each $14\frac{1}{4}$ feet by 15 feet, all opening off an 8-foot corridor running the full length of the new wing. Directly over the control room there is a file record room measuring 9 feet by $15\frac{3}{4}$ feet. Opening off the corridor is an observation balcony in one corner of the transformer room.

The entire first floor, excepting the upper part of the transformer room and tube space, are wood paneled with mahogany and the floors of the corridor and offices are covered with carpets or rugs. The second floor of the new building is set aside for consultation and executive offices of the radiologist.

The entire new addition, 44 feet long and 53 feet wide, has been constructed along the latest lines of hospital design, offering the most comfort to the patient and maximum ease and dispatch of service. It is entirely fireproof and conforms in every respect to the high grade construction of the original building erected in 1925 to accommodate 125 beds. The annex, together with equipment, cost approximately \$75,000. It was designed by Davis and Wilson, architects, who also designed the original hospital building. In addition to housing the x-ray equipment, the annex includes thirty additional rooms for patients.

The cancer clinic of Lincoln General Hospital is under the direction of Dr. Roscoe L. Smith and Benedict Cassen, physicist, who assisted in the designing and building of the new tube.



The Problem of the Month

Should Physicians Hold More Than One Staff Appointment?

THE problem of distributing hospital staff appointments equitably among the physicians of a community is one of deep concern to the patient, to the hospital and to the doctor. The patient wishes his personal physician to have a staff appointment at the hospital which the patient prefers. Obviously the more appointments a physician has the more likely he is to be on the staff of the preferred hospital.

The physician naturally is influenced by these considerations, but he also realizes that many staff appointments mean more time spent in travel and a less intimate relation to the hospital personnel. Obviously a physician would not be satisfied with only one hospital appointment, particularly if the appointment were in a public hospital that had no private beds. Some physicians, especially in large cities, have no staff appointment at all. Fewer appointments might permit a wider distribution of staff privileges among the physicians of the community.

The crux of the situation is the effect on quality. Will physicians with two, three or four staff positions give as much time to their patients, to staff conferences, to research work and to teaching as they should?

What is your view on this subject? How far do you think a hospital should go in regulating this matter?

*Dr. Fred L. Adair,
Chicago Lying-In Hospital, Chicago:*

"I think it is highly desirable both from the standpoint of the hospital and the physician for the physician's work to be concentrated in one institution. It conserves the time of the physician immeasurably and, I believe, he can render much better service to his patients if he works in the same institution consistently, that is, other things being equal.

"As a practical problem, it does not work as well, because the physician in private practice usu-

ally has to cater, more or less, to the personal, religious and other viewpoints of his patients. It is often extremely difficult, or almost impossible, for the doctor to be too arbitrary in his selection of a hospital for his patient.

"It has often seemed that even closer association between physicians and hospitals would be desirable. If arrangements could be made for office accommodations for the physician, in close proximity to the hospital in which the work is done, I believe it would promote greater efficiency and reduce the hospital's operating cost. In this way it would be possible for the physician to utilize the clinical x-ray and other facilities of the hospital, which would increase their usefulness, reduce the overhead of the hospital, and also reduce the overhead of the physician, inasmuch as it would not be necessary for him to maintain such types of diagnostic and therapeutic facilities in his office."

*George D. Sheats, Superintendent,
Baptist Memorial Hospital, Memphis, Tenn.:*

"There is no question but that it is a distinct advantage to any physician to be appointed to as many staffs as possible. Especially is this true where the appointments are in open staff voluntary hospitals. Such appointments enable the physician to care for out of town physicians who have charity patients who need hospitalization. Staff appointments in more than one hospital enable the physician to have a year around service. This, of course, is true only in voluntary hospitals that admit charity patients.

"From the standpoint of the open staff voluntary hospital, it is a matter of self-preservation to allot staff appointments on a basis of patronage of the institution. It behooves such a hospital to make staff appointments on the basis of the staff member's loyalty to the institution, as evidenced by his patronage and willingness to cooperate with its management.

"Therefore, I should say that from the stand-

point of the physician, it would be an advantage to him to hold as many staff appointments as possible, but from the standpoint of the hospital staff appointments should be confined to men who have expressed themselves as being partial to that particular institution."

*Leo Arnstein, Trustee,
Mount Sinai Hospital, New York City:*

"It depends entirely upon the type and the amount of work that the physician is doing as to whether he can do justice to more than one position at a time. In the lower ranks of physicians, where presumably the time required both for hospital work and for private practice is not too great, it is probably an advantage both to the hospital and to the physician to have the physician fill positions in, say, two institutions. It broadens his contacts and gives him additional experience, the benefit of which will accrue to both services.

"In the higher grades of the attending staff, it is questionable whether a physician can, if his interest is divided, give his best efforts to a service to which he is expected to supply the initiative and inspiration. One aspect of this question is the desirability of dividing the limited number of hospital positions among as large a number of physicians as possible.

"Naturally, the above suggestions must be subject to qualification, depending upon the type and quality of work which is under consideration."

*Charles A. Wordell, Director,
St. Luke's Hospital, Chicago:*

"Whole-hearted loyalty by a hospital staff permits close cooperation in perfecting service to the staff members and their patients. Divided loyalty begets destructive criticism without any attempt to correct conditions for betterment of service.

"Physicians who visit many hospitals must spend much time in travel between these institutions, which often are widely separated, with the result manifesting itself in hurried examinations, inaccurate diagnoses and rapid surgical procedures. Lack of time prohibits the development of departmental conferences and clinical and pathologic research.

"Complete harmony among staff members is most essential to the progress of hospitals. Such harmony is always jeopardized by the feeling that certain members favor institutions other than their own. This leads to a feeling that patients are being sent to other institutions. The result is loss of revenue by the hospital because of patients being hospitalized elsewhere."

*W. T. Barbour, President, Board of Trustees,
Grace Hospital, Detroit:*

"In hospitals of 100 to 150 beds, or over, staff members in major divisions, such as medicine, surgery, obstetrics and gynecology, should not hold dual staff appointments, as most of the physicians have specialized in their particular field and have ample opportunity in one hospital to devote their services to the subject in which they are best qualified. In limited specialties, such as orthopedics, urology and gastroenterology, this objection does not hold good, but the appointments should be limited in number to not more than two or three.

"The practice of holding several staff appointments is not uncommon in small cities or smaller hospitals. In some instances these appointments are the result of one or more men developing outstanding professional ability in a particular branch of medicine.

"For these reasons it is difficult to give a definite answer to the question. In some instances it may be desirable for physicians to hold more than one staff appointment, and in other instances, as stated above, it might not work to the advantage of either the hospital, the physician or the patient."

*Dr. L. A. Sexton, Superintendent,
Hartford Hospital, Hartford, Conn.:*

"Anything that is so well worth doing as the practice of medicine is worthy of the individual physician's best efforts in his particular job. No specialty is so narrow in its scope as to justify the individual specialist in attempting more than one branch of medicine. The general practitioner is the one exception to this.

"No member of the Hartford Hospital staff, which numbers more than eighty, has more than one appointment, nor is any staff member expected to deal with any branch of medicine except the specialty that he represents."

Periodic Payment Plans Fall Under Insurance Laws

The insurance commission of Wisconsin, in response to a request from the Wisconsin Hospital Association, has recently ruled that periodic payment plans for the purchase of hospital care fall under the insurance laws of Wisconsin and can be handled only by licensed insurance firms.

Insurance has been defined in the Wisconsin courts as "a contract whereby one party agrees wholly or partially to indemnify another for a loss or damage which he may suffer from a specified peril," and the fact that the agreement is made between hospitals and individuals or groups of individuals doesn't take it out of the insurance realm.

Administrators Visit a Neighbor and Learn Some New Methods

Last month Doctor Doane conducted a party of superintendents on a fanciful tour through a well managed hospital. This month the party observes credit, social service and dispensary methods. The kitchen, operating room and morgue are also visited and methods of performing the work of these departments are noted

HOSPITAL administrators can learn new and improved methods only by observing the work of other executives and by keeping abreast of the times by constant and thorough perusal of current institutional literature. The administrator who does not daily increase his executive knowledge and ability has reached the height of his usefulness and is inaugurating his professional decline.

Last month there was described in these columns an imaginary ward walk through a leading hospital. Some modern methods found in this institution to facilitate the performance of the day's work were described in detail. A second institution is now visited in the same manner and several procedures observed at this time are described.

Let us linger for a moment in the office of the credit worker to observe the methods by which she endeavors to adjudge fairly the ability of the patient or his relatives to meet the cost of hospital care. We observe a kindly, patient, effective credit worker as she interviews a succession of patients asking to be admitted. Only those persons seeking admission to the ward who cannot meet the full fee are referred to this officer. Some persons believe that all patients except those going directly to private rooms should be thus interviewed. Certain sound reasons underlie this contention. For

By JOSEPH C. DOANE, M.D.

Medical Director, Jewish Hospital, Philadelphia

example, in a few instances miserly persons have sought and gained ward care when they were able to afford private accommodations and to pay physicians' fees as well.

The clerk whose work we are observing is apparently aware of this possibility for she tactfully diverts an applicant for ward care at a reduced rate into the hospital's semiprivate department to the apparent satisfaction of even the patient himself. The credit officer is patently moved by the story of the distressed wife whose ailing husband has endeavored for many weeks to support his young family. An income of thirty dollars a week at first glance seems to indicate that no request for reduction of fees should be asked. But when it is learned that the family consists of the aged parents of both husband and wife in addition to several young children, and when it is learned that this income has been received for only a few weeks and that many expenses have been incurred during a long period of idleness, there is justification for the credit worker's prompt acquiescence to a 50 per cent abatement of ward fees. It becomes clear at once that the size of the income alone does not determine ability to pay. Family expense must also be considered. This fact is too seldom appreciated since casual observers are prone to classify ward and dispensary patients by the sole standard of the amount of money they earn.

Capable Credit Worker Is a Great Asset

A mother with a child at her side is next interviewed regarding the admission of the latter. Although a note from the physician states the family's inability to meet hospital expense, the credit worker courteously insists upon the payment of a small fee which is quickly agreed upon by the parent.

The successful credit worker is not always the one who adopts harsh methods. She may at times be required to display firmness but this attitude

should never be mingled with discourtesy or lack of kindness. She never permits an impression of disbelief in the doctor to reach the patient. She is sympathetic, understanding and loyal to the hospital in requiring that those who are able to pay something shall do so. Such a worker is a great asset. Perhaps the most valuable possession of any institution is its reputation for manifesting a humanitarian spirit in its dealings with the needy in its community. To allow pure commercialism to crowd out this trait is to lose a priceless asset.

The Chief Aim of Medical Social Service

The credit worker in this institution is, as she should be, an attaché of the business office. Her office is a businesslike place where fair dealing is found and where oppression or lack of understanding is never allowed to enter.

A visit to the social service department reveals a group of apparently well trained persons, each intent upon solving the problems of the division to which she is assigned. Here again a professional and courteous atmosphere reigns. A blasé and hardened attitude toward trouble and distress seems to have no place. It is found that this department has long since passed the stage of errand girl headquarters for the institution. Nevertheless, it is interesting to overhear a conversation in which a worker is requested to obtain funds for the purchase of an artificial limb and clothing for a destitute family.

No social service department can evade performing similar duties. Yet it should be remembered that hospital medical social service has as its chief aim the assistance of the doctor in diagnosing and treating disease. Much time of highly trained workers is wasted because some persons do not understand the functions of this department. It is folly to permit well paid specialists to perform the work of errand boys and untrained clerks.

The social service department can do much to speed diagnosis by promptly painting the picture of home conditions upon the patient's chart. Convalescent care, reconstruction of families, rearrangement of occupation upon the doctor's advice and readjustment of personal difficulties deterrent to medical relief are but a few of the duties being performed under the eyes of the visiting party. The curative aspect of medical social service is too little practiced in the hospital and its preventive angle is practiced even less. Apparently a helpful and understanding relationship exists between the visiting staff and the social worker since requests for aid come not by word of mouth or by telephone but are formally presented as prescriptions from the doctor upon another specialist.

Much is being said and written in regard to dis-

pensary abuse. Before the shrinkage of professional incomes physicians paid less attention to the reputed presence of this profiteering. This intangible evil has now become almost as fearsome a specter as so-called state medicine. The visitors approach the dispensary, curious to learn what methods are being practiced to guarantee fair play both to the doctor and to the patient. A minimum dispensary fee of twenty-five cents is required but in the genito-urinary clinic a slightly greater rate has been set. No abuse of persons or undue wounding of feelings should accompany this effort to prevent dispensary abuse. Contrary to the practice in some localities, it is considered inhumane deliberately to require a patient to acknowledge himself a pauper in order to gain admission to the hospital's out-patient department. Some persons insist that the harsh words, "charity patient" or "for indigent patients only," be displayed above every dispensary door. Others feel that a firm, kindly insistence upon the proper classification of out-patient applicants will bring the same result. Better let the hospital be deceived and defrauded on a small scale than humiliate patients whose very presence in the dispensary is sufficiently depressing to them.

An intelligent effort is being made in this dispensary to separate the deserving from those who seek free treatment under the guise of pretended real economic need. Each applicant is asked the name of his family physician. When a patient states that he has recently visited a doctor's office, the physician is contacted by telephone to learn whether he would be willing to care for the patient during his period of need at a nominal fee or even for no fee at all. Much to the credit of the medical profession, the doctor often gladly acquiesces to this proposal.

Cooperation With the Family Doctor

When a patient is discovered who can pay more than the usual dispensary charge, he is referred to his community physician who is promptly notified of this fact. It is proper to assume that the same modern and conscientious care will be given to the patient in a private medical office as would be rendered in an out-patient department. To insist upon inferior treatment because a patient is able to pay a minimum sum is decidedly unjust. As a further attempt to cooperate with the family doctor, a list has been prepared of physicians who would be willing to perform dressings and render ambulatory aid to patients for a minimum fee.

The greatest waste in any out-patient department is in the time of patients. Unfair delay in the treatment of those occupying waiting room seats is observed everywhere. Courtesy and

thoughtfulness for the rights of others seem never to have gravitated to the out-patient department.

Glasses are being sold to a patient in the dispensary we are visiting. The inspecting party questions the wisdom of this practice. Some institutions realize handsome sums by retailing frames and lenses. Unless reasonable rates cannot be secured from local dealers in optical goods, it appears that the hospital should hesitate thus to enter into competition with local business men.

Physicians Appear Promptly at Clinics

The visiting party finds a branch of the institutional drug store functioning smoothly in the dispensary. There are no long lines of waiting patients. Prescriptions are filled on the basis of a dispensary formulary which saves money for the hospital and both time and money for the patient. Clinics do not lag because physicians appear promptly at the appointed hour and the dispensary supervisor, who is a physician, apparently has administrative matters well in hand. The visitors observe that an orderly, businesslike, courteous atmosphere reigns.

The hospital kitchen is next inspected. The noon-day meal is in the process of preparation. Each worker apparently understands the details of his own duties. A bustling, orderly atmosphere prevails. There are few phone messages from wards conveying last minute changes in diets. Floors, tables and ice boxes are conspicuously clean. The meal now being dispatched to patients and methods employed in building the menu for the next few days attract attention. The supervising dietitian, accompanied by the chef, inspects the ice boxes and notes the amount of raw materials on hand. Since the number of meals to be served on the following day is known and standards have been adopted covering the requirement for each ration, it is a matter of simple arithmetic to decide upon the amounts needed to meet these requirements.

The trucks have returned from the wards and the dietitian is handed a slip containing departmental garbage weights for the previous day. She notes that in certain divisions these weights have increased and sends for her assistant to learn the reason. It is found that a particular item of food on the menu was universally refused by patients. An assistant dietitian is sent to the private room department to learn the food preferences of new arrivals and to bring back complaints or commendations from patients who have been under treatment for some time. A telephone request is received for a dietitian to come to the medical wards to discuss the menu for a diabetic patient. The lesson has apparently been learned in this institution that the food specialist's assistance in wards,

private rooms and dispensaries is often just as important as her work in the kitchen proper.

The operating room is next inspected. A splendid example of the efficacy of an operation schedule board is observed. Orderly preparation of rooms for the use of the surgeon and careful arrangement of time schedules are noteworthy. Rules governing precedence of surgeons have been decided upon and personalities, which so often creep into a surgical staff because of operating room schedule clashes, seem totally obviated. The much abused term, "emergency operation," apparently has been thoroughly defined. Anesthesia rooms are remote from operating rooms and the right of patients to be protected from undue alarms has apparently been safeguarded. Masks cover the nasal apertures of the operators, observation seats are occupied and overanxious spectators do not hinder the surgeon in his work. The operators are quiet and courteous and an air of scientific interest prevails.

The anesthetist is not dividing her attention between the work of the operator and the business at hand. Her anesthesia apparatus is equipped with large tanks of gas and oxygen since these gases can be purchased more cheaply in large quantities than in small containers. In another room where spinal anesthesia is employed great care is exercised to avoid conversation concerning the nature of the operation. There is no more thoughtless and inhuman practice than that of discussing the details of an extensive operation within the hearing of a conscious patient.

Scientific Seriousness Prevails at Necropsies

In another room, removed from the main operating clinic, a series of tonsillectomies is being performed. Hospitals are not always properly thoughtful of the safety and feelings of their little patients and one often observes on tonsil day long lines of stretchers, each containing a patient awaiting his turn. No excuse can be given for permitting the outcries incident upon anesthesia to be transmitted to the ears of children awaiting the surgeon.

The institutional morgue, that place so rarely inspected by the institutional superintendent, is important to the scientific progress of the hospital. Here a necropsy is in progress. The operator, properly gowned and gloved, is intent upon the performance of his task. Members of the visiting and intern staffs are present. Hats are not worn and smoking is not practiced. The intern who has studied the case in the ward is reading aloud the clinical history. A serious attempt is being made to discover the cause for variance between the clinical findings and those of the pathologist. There is no undue laughter or hilarity. Scientific seriousness is evident and there is respect for the dead.

Editorials

Three Years' Changes in Nursing Education

A READING of the sections thus far available of the report on the second grading of nursing schools is both satisfying and challenging. It is satisfying because on the educational side marked advances are to be noted in comparing the 1932 data with similar data for 1929. It is challenging because on the economic side there is actual loss of ground.

The principal advances are in the preliminary education of student nurses, 90 per cent as compared with 70 per cent having had at least four years of high school training, and in the experience and qualifications of faculty members. Of the faculty members 51 per cent in 1932 as compared with 42 per cent in 1929 had completed four years of high school and 20 per cent as compared with 17 per cent had had one or more years of college work. Except for the ward heads and assistants, the median number of years out of training increased from 6.7 to 7.8. Furthermore, perhaps due to the depression, there was a marked reduction in the turnover of faculty members. There was a decided increase in the number of schools which affiliated with others to give their students a well rounded training, 57 per cent as compared with 48 per cent. A far larger number of health examinations and more adequate vacations were given to student nurses in 1932. In 1929 only 8 per cent of the schools devoted as many hours to instruction in theory as is recommended by the National League of Nursing Education, but by 1932 a total of 22 per cent of the schools equaled or exceeded this standard.

But what is on the other side of the picture? The most striking negative result is that the number of students enrolled actually increased. No person who will face the facts can deny that there are now, and were before the depression, far more nurses than can be employed under our present system. If nursing were provided strictly on a basis of need, without regard to the patient's ability to pay, it is probable that the present supply of nurses would not greatly exceed these needs. But so far, except for limited groups like the U. S. Army, no such plan is in effect in this country. Therefore, while the 6 per cent reduction in the number of nursing schools is a step in the right

direction, it is more than offset by the increase in the average size of schools. The total number of students rose from 78,771 in May, 1929, to 84,290 in January, 1932.

The other discouraging aspect is that the hours of duty increased. Night duty, it is true, was slightly reduced, but the hours of day duty are longer. Unfortunately comparative data on the hours per week for the two gradings are not given. This is even more important than the hours per day since an 8-hour day may mean a week of 44 hours, of 48 hours, of 56 hours or even of 60 hours! Eighty-eight per cent of the schools require more than 48 hours' work of their students on day duty and 85 per cent, 56 hours or more on night duty.

One cannot help but agree with the opinion of the Committee on the Grading of Nursing Schools "that in most schools the hours on duty per day and per week are too long. Even an 8-hour day is too long if class hours are added to those 8 hours. . . . Students need time off for classes, for study, for discussion and for outside reading, as well as ample time for rest and recreation. Moreover, the time they do spend working on the ward should be primarily educational in character. Most of the members of the grading committee feel that the 48-hour, 6-day week of hard, active work, much of it noneducational, is long enough for the full-time adult worker. It is too long for the student nurse."

Of course the increase in students and in their hours of work, if justified at all, must be justified on the basis of the dire financial need of hospitals. When this need becomes less acute the excuse will disappear. These disappointing aspects of the second grading should not, however, obscure the fact that the schools have made substantial progress toward providing a real education for nurses. Nurses may take comfort in the fact that most of the advances to date are in those fields that are partially or entirely under the control of nurses. In the loss of ground on the economic side lies a challenge to the hospital and to the public.

Pensions for Hospital Employees

ONLY one institution out of the 322 that responded to a questionnaire circulated by the American Hospital Association's committee on the retirement of employees put into operation last year any pension or retirement system for the benefit of aged and faithful, yet incapacitated employees, according to the committee's report.

For many years this subject has been discussed on the programs of hospital associations throughout the country. Such a scheme is founded largely

upon a spirit of fair play to faithful employees who have given the best years of their lives to the institution. Yet in few hospitals has it been found practical to work out such a scheme. No doubt long service on the part of an aged superintendent is often rewarded either from private sources or from the purse of the hospital itself. Such sporadic instances serve to justify the fairness of a pension or retirement policy and present a strong argument why such a plan should be made to apply to a greater number of employees.

As better economic times return, hospital boards should again carefully consider this plan. Endowments especially directed to meet this need could be secured were boards of directors thoughtfully to urge the wisdom of retirement provisions. The MODERN HOSPITAL looks hopefully to the future for this practical exemplification of the humanitarian spirit of which hospitals generally are so justly proud.

Doctor Washburn—A Leader in Hospital Administration

AFTER a long period of distinguished service at Massachusetts General Hospital, Boston, Dr. Frederic A. Washburn will relinquish his directorship of that institution next February because of a ruling covering the age retirement of the staff. Since the institution first opened its doors for the care of the sick in 1821, no other director has served for so long a period as has Doctor Washburn.

Doctor Washburn first became associated with Massachusetts General Hospital as a surgical intern immediately after his graduation from Harvard Medical School in 1896. Two years later he was appointed assistant resident physician. He left the institution the following year to enter military service, and later returned to Massachusetts General Hospital as assistant resident physician, under Dr. Herbert B. Howard. When the latter accepted the superintendency of Peter Bent Brigham Hospital, Boston, about to be built, Doctor Washburn became resident physician at Massachusetts General Hospital on May 2, 1908. He has held the position ever since under the various titles of administrator and director.

Doctor Washburn served as an army surgeon in the Spanish-American War with the 6th Massachusetts Volunteer Infantry. Soon afterward he again donned uniform and served in the Philippines during the insurrection as surgeon to the 26th United States Volunteers.

After America entered the World War, he was

appointed commanding officer of Base Hospital No. 6, organized largely from the staff of Massachusetts General Hospital. In 1918 he was ordered to England and given charge of hospitalization in the chief surgeon's office in the Winchester district. Several months later, having been promoted to base surgeon, colonel, U. S. Army Medical Corps, he organized American army hospitals in Great Britain. In recognition of his splendid military service, he received the Distinguished Service Medal and the British decoration of "Order of Companion of St. Michael and St. George."

Doctor Washburn was ever seeking ways in which his hospital could render greater service to the public. Before the World War, he had built what is believed to be the first large unit for the care of wealthy patients—those people who are important contributors to charities but who had until then found scant accommodations suitable for themselves when they needed hospitalization. He was largely responsible for the broadening of the scope of the institution so that it might care for people of moderate means as well as for the poor and the rich. The Baker Memorial Hospital, opened in 1930, provides for those people who do not need charity but who can afford only moderate charges. Both in appointments and organization this hospital has served as a model which others have been glad to copy.

Since 1915 Doctor Washburn has served also as director of Massachusetts Eye and Ear Infirmary and has knit together the two institutions through the building of a joint out-patient department and the reorganization of the professional and nursing staffs. Many of the present buildings of Massachusetts General Hospital were designed and erected during Doctor Washburn's administration, notably the orthopedic ward, a new nurses' home and an administration building.

During Doctor Washburn's busy years he has not limited his services to military duties and the administration of hospitals. He was president of the American Hospital Association in 1912 and 1913 and ever since he has given his services without stint on important committees of that organization and of state and national medical societies. He is chairman of the board of trustees of the Gardner State Hospital. His services have frequently been required as a consultant in hospital building and reorganization in various parts of the country, and there are almost daily demands on his time to help solve the lesser problems facing distracted superintendents of smaller hospitals throughout the country.

Doctor Washburn has been for many years an educator in the truest sense and has been a con-

stant inspiration to those younger men with whom he has come in contact. By example and precept he has taught them the necessity for courage, fair dealing and common sense in administrative matters. Splendidly equipped executives throughout the hospital field who were trained by Doctor Washburn are daily spreading in ever widening circles the influence for good that has been his contribution to this generation.

A Constructive Step

THE appointment of George A. Collins as Washington representative of the American Hospital Association is news of first importance. He takes up his duties there at a time when, more than ever before in peacetime, the activities of the national government are of outstanding importance to people in every walk of life.

No less than other agencies, hospitals are finding that new laws, new rulings and decisions, and new appropriations are of vital interest. The NRA, the processing taxes on cotton and wheat, the efforts of the Department of Agriculture to raise the price of corn, hogs, certain fruits and butter, the milk codes, the new taxes on estates, the disbursements of the federal emergency relief administration, the decisions of Congress regarding hospitalization of veterans, the loans of the federal public works administration, the taxes on surgical instruments, and the regulations regarding the use of scientific alcohol and medicinal liquor—these and other activities do or may react on hospital budgets.

In the confusion that is inevitably associated with the inauguration of a large social reform, the interests of hospitals naturally will not be uppermost in the minds of government officials. While the officials have on several occasions indicated a genuine desire to give favorable consideration to the needs of hospitals when properly presented, they cannot be expected to think of these needs without prompting. The voluntary joint committee of the American, Protestant and Catholic hospital associations has rendered yeoman service in presenting hospital needs.

A voluntary committee, however, cannot be sufficiently "on the job" to meet the situation. The American Hospital Association has therefore done the only thing practical by appointing a resident representative during the emergency period. Mr. Collins was formerly superintendent of the Denver City Hospital and health commissioner of the city of Denver. Working under the direction of the joint committee, he should be a potent force for the good of hospitals during these trying years.

Every hospital in the United States, large or small, will benefit from the work of this representative and of the joint committee. It is appropriate, therefore, that the American Hospital Association, in asking for funds to support the work, should put the appeal on a democratic basis. Each hospital is asked to contribute \$5, the larger hospitals to give more if they will. All of this money will be put in a separate account and used exclusively for this special purpose. It should be a matter of pride with each institution in the United States to send its contribution to this special fund promptly.

The Epidemic of Amebic Dysentery

ALTHOUGH in her life Texas Guinan was not noted as a great public servant, her death may serve well her fellowmen. It will dramatize to all classes of society the danger in the present epidemic of amebic dysentery. She, it now appears, is one of the victims.

The present epidemic, according to the *Journal of the American Medical Association*, probably originated from two food handlers in a Chicago hotel who were first infected in 1927. Although apparently well, they acted as "carriers," infecting both guests and fellow employees. Since both patrons and kitchen help of hotels are extremely mobile groups, the infection has been spread far and wide. Cases apparently of Chicago origin are reported from Massachusetts, Georgia, Tennessee, Nebraska, California, Texas, Louisiana, British Columbia and France, to note only a few. Cases are found in small towns as well as metropolitan centers.

Hospitals, because of their strategic position, should be fully alive to the situation. Attention of staff members should be directed to the hazards, particularly to the fact that amebic dysentery has frequently been diagnosed as ulcerative colitis, mucous colitis, appendicitis, peritonitis, bacillary dysentery, and other diseases. Hospitals with properly equipped laboratories may well offer to cooperate with health departments.

Hospital employees, particularly food handlers, should all be examined with the greatest care.

Dr. Herman N. Bundesen, president, Chicago Board of Health, states that a great deal of the spread of the disease is undoubtedly due to carriers engaged in food handling and that the foci remain unrecognized unless routine stool examinations of all food handlers are made.

The Chicago Board of Health requests that it be notified of all cases that seem to have emanated from Chicago.

Maintenance, Operation and Equipment

How to Stop Waste and Cut Costs of Heat, Light and Power

By CARL A. ERIKSON

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THE war on waste in the hospital is an endless one. It has many fronts—many sectors of activity. Food, salaries, maintenance, laboratories, heat, light and power are a few of these.

The commander in chief is the superintendent. He directs the higher strategy, determines the points of attack, outlines the battles and determines the objectives. With the aid of his assistants, the superintendent notes carefully the results of his drives for economy.

A good general, of course, wants to know all he can about the strength of the enemy forces, in this case, the operating expenses.

Among the most difficult costs to figure are heat, light and power. In the average hospital, from 12 to 20 per cent of the budget is charged to this division. The cost ranges from \$0.60 to \$0.90 per patient day, which probably makes this division the second or third largest item in the budget. But when the superintendent tries to find out how these forces are disposed he generally encounters many obstacles. If he wants to know how much heat, light and power is used, where it is used, why it is used and how much it costs, he is likely to find that he does not have the records.

Something Is Wrong Here

One way of measuring costs, although it is crude, is to compare the costs of heat, light and power per 1,000 cubic feet in different buildings. Our organization recently procured cost figures on these three items from nine institutions for the years 1929, 1930 and 1931. Four of the cases studied were Chicago hospitals, and their average costs per 1,000 cubic feet of building varied from \$14.78 to \$19.12. If the institution with the higher figure could reduce its costs to the same level as the institution with the low costs, a saving of nearly 25 per cent would result.

A study was also made of two recently completed and similar hospitals that are adjacent to each other. Records of the number of pounds of steam used from September, 1931, to June, 1932, show that one of these hospitals used 480 pounds of steam and the other 1,130 pounds of steam for each square foot of radiation. It would seem that the second hospital could save between \$5,000 and \$8,000 a year if it could reduce the amount of steam used to the same basis as the first hospital.

Vacant Rooms Should Not Be Heated

A direct comparison of costs for three nurses' home buildings at the Massachusetts General Hospital appeared in an article on costs of nursing education in a recent *Bulletin of the American Hospital Association*. The combined cost of heat, light, power and water was \$25.30, \$29.60 and \$34.75 per occupant for the three houses. If the high cost house could be reduced to the low cost house (and it may not be possible), the saving would be over \$1,000 a year.

There are many possibilities in the drive on power economies. How should the attack be developed? Consumption and cost of production are both important and must be given equal consideration.

Probably every superintendent has learned to turn off an electric light that is needlessly burning, but how many superintendents turn down a radiator in an unoccupied room? Steam costs the average hospital more than \$0.60 per 1,000 pounds. Every square foot of radiation uses about 500 pounds per year, which costs about \$0.30. The radiator in the superintendent's office, for example, probably costs \$22.50 a year, or several times the cost of lighting the room. When the office is vacated on Saturday the lights are turned off and the windows closed, but the radiator usually is left on.

Every superintendent has had the experience of

entering an unoccupied room and finding the radiator blazing away. Large sections of the hospital are unoccupied from 5 p.m. to 8 a.m. and from Saturday noon to Monday morning. If the radiators in these sections were turned off during those hours, which represent over 67 per cent of the total number of hours in a week, the steam consumption in those radiators would probably be reduced as much as 35 per cent. This would mean a saving of \$5 a year for each 50-square foot radiator.

Zone Heating Control Should Cut Costs

Hospitals that have separate buildings for laboratories, dispensaries and nurses' homes, will find this problem comparatively simple, because the piping should be arranged so that the entire building can be cut off. It is possible, except in the most severe weather, to cut off the nurses' home after hours and turn it on again an hour or so before the rising bell. Central control of various zones of the hospital would, no doubt, cut costs considerably. It is extremely wasteful to have to heat the entire hospital simply in order to have heat in the operating rooms.

What about the sterilizers? It should be possible to arrange the sterilizing schedule so that the fires can be banked at night, thereby saving the wages of the night fireman, and also a little coal.

Many heating systems do not function as economically as they should because they must operate on 5 to 10 pounds of pressure, due to the fact that there are old one-pipe steam units on the line. Under such conditions it is necessary to overheat the newer buildings in order to heat the older ones properly. A little ingenuity and a slight expenditure for piping changes will usually remedy this.

There are many ways that heating costs can be reduced at small expense. Radiator valves and traps should be checked to see that they are working properly. A check should be made to make sure there is no waste of returns from radiators and other steam using equipment. Windows should fit tightly. Weather stripping will pay big dividends.

Carelessness, wastefulness and leaky valves result in huge water consumption every day. Many hospitals are indifferent to this matter because they receive water free. In one hospital, for example, water consumption ranged from 1,000 to 1,200 gallons a day per patient. The only cost was for the pumping. The hot water consumption, however, was 400 gallons a day per patient, and it cost \$0.19 a day per patient to heat the water. Figuring it another way, $\frac{1}{8}$ of a pound of coal is required to heat each gallon of water, and at the rate of 400 gallons a day per patient 50 pounds of coal would be needed.

Hospitals that have a refrigerated drinking water system have probably already set the valves on the supplies to these at a point where a minimum amount of water is used. It does not cost much to cool this water, but a bubbler that has too great a pressure on it probably wastes up to 95 per cent of the water.

Most hospitals have reduced the size of electric light bulbs wherever it was considered feasible; but how often do they clean the bulbs and the fixtures? A recent investigation by a lamp manufacturer disclosed that approximately 30 per cent of all the wattage consumed for commercial and residential uses was wasted due to dirty lamps.

Many hospitals have a number of buildings and a corresponding number of electric meters—one for each building, or if power is used, two for each building. If the electric bills are numbered separately on each of these meters the hospital is paying a high price for its electricity. In some states it is permissible for an institution with several meters to add the wattage on each building and determine the bill on such a basis, thereby obtaining a lower average kilowatt hour rate than is possible with the separate bills. In other states, it is not permissible to do this unless the supply lines all pass through one meter. The expense of such rewiring usually pays for itself in a short time.

No matter whether the hospital has a separate refrigerating system or a unit refrigerating system, care should be exercised in keeping the doors closed, or rather opening them as little as possible. The fastener that is intended to hold the door tight against the frame should fit tightly or else the leakage will be tremendous.

Cutting Ventilating Costs

Most hospitals that have artificial ventilating systems probably do not use them half enough. The average superintendent feels that the ventilating system is one of those things the architect specifies in order that he (the superintendent) can later cut it out—at least the superintendent feels that way until he begins to receive complaints about odors. He then finds what a help the ventilating system is. Usually there is only an exhaust system from the odor producing areas. If the ventilating system is operated only when the odor is being produced, for example, in the kitchen when cooking is going on, the hospital will be free from obnoxious odors and a saving will be effected in steam consumption and in current used to drive the fans.

Unoccupied areas are a burden on the operating expenses of a hospital. Radiators in unoccupied areas should, of course, be turned off when possible. This should be done under the guidance of the engineering department so as to avoid danger of

frozen pipes. The engineer should also make periodic inspections of unoccupied areas to make sure that all supply faucets are tight, that the water-closet flush valves are not leaking, that the sterilizers do not leak steam, that the lights are off and stay off in every room and closet, that the refrigerating supply line and the electric current are completely cut off, and that the ventilation to these areas is shut off.

So far I have outlined methods of reducing consumption practically without expense. It is impossible to estimate accurately how much could be saved if this program were carried out, but it seems safe to say that the reduction would average about 10 per cent.

Coal Should Not Be Bought on Price Alone

So far only consumption has been considered in this attack on waste. There remains the big field of production.

The first thing to consider in the production field is coal. While this is no place to discuss the technicalities of coal, it is imperative to call attention to the fact that the heat unit per pound of coal varies from 9,000 to 13,000 B.t.u's. Obviously coal cannot be bought on price alone. It should be bought on specification, and regular tests should be made to see that the coal meets the specification. It is not expensive to do this, and it is well worth while because the quality of coal cannot be determined by looking at it. Regular checks should be made to ensure that the hospital is receiving full weight when coal is delivered.

The way the coal is burned should be observed. I know of one case where a coal with pronounced coking properties was used. People in the neighborhood were removing coke from the ashes by the cart full, and one boy stated that this was all that his parents had burned in their furnace for a long time.

Soot and scale act exactly like insulation, and, consequently, the boiler must be kept clean. The soot should be cleaned out of the boilers daily, and where soot blowers are available, they should be used every eight or ten hours. Soot alone can deflate the coal dollar to \$0.90, and scale is likely to take off another \$0.10.

Fire control is important and a fireman may be judged by the way he controls the fire. Too much air wastes fuel. The air should enter the ash pit and then pass up through the fuel bed. Firing doors when open let in air that cools the boiler and wastes fuel.

Air leaks in the boiler setting should be repaired at least twice a year. The piping doors, the breeching cleanout doors and the stack cleanout doors should fit tightly.

Overflow of the feed water heaters and the drip tank is a waste of coal. It is a common practice to use cold water in the suction of the vacuum pump—that means waste. This alone may consume 1,000 pounds of coal a day.

So far only one of the lines of attack in this war on waste in the boiler room has been considered. When possible, it should be supplemented by reinforcements in the form of additional expenditures for equipment.

Rapid expansion has resulted in wasteful methods in many hospitals. I know of one hospital that has eight boilers. That institution could reduce its coal bill approximately 25 per cent by installing two large boilers in place of the eight small ones. Such equipment is wasteful for the reason that one big fire can do the work of two small ones, with less fuel. Numerous small boilers also afford an excellent opportunity for a bad practice seen in many places, that is, keeping two slow fires going rather than one good fire. This is easy on the fireman, but hard on the coal supply.

The carbon dioxide recorder is a measure of firing efficiency which, if used intelligently in the boiler room, will save many tons of coal annually and, if checked occasionally by the superintendent, will tell an interesting story.

Every good engineer watches the weather forecasts so as to be prepared for sudden changes in the load. To make sure, however, that the engineer will always have this information, it might be well to subscribe to the Weather Bureau Service. The engineer should know at all times what the outside temperature is. A recording thermometer is a good thing, but any type of thermometer that may be seen easily from the inside of the boiler room will be helpful to the engineer. If the plant is a large one it may be worth while to connect such thermometers so as to control the dampers on the boilers automatically.

Good Stokers Will Save Fuel

Serious consideration should be given to connecting isolated buildings to the main heating plant and also to the main electric switchboard. Whether or not economy is possible depends on the length of the transmission line.

Coal handling equipment with overhead bunkers is justified in a few institutions by the resultant saving in labor. Some form of mechanical ash handling device is justified in practically all institutions. In many places with hard water, water softeners will prove an economy for the boiler room, for the hot water system, for the sterilizers and especially for the laundry. The function of the water softener in the boiler room is to reduce the amount of scale, although the scale should not

be eliminated entirely as it is a protection against corrosion.

Stokers are almost invariably used in large plants. It is generally agreed that good stokers will result in a fuel economy of at least 10 per cent. While stokers do not always result in wage saving, the fuel economy that results is so great that they usually pay for themselves in a short time.

Accurate Measuring Devices Are Essential

Many institutions drive their refrigerating pump, house pump and similar devices with electric motors. These electric motors are an important factor in determining the amount of electric current used. Institutions that purchase their current from outside sources should consider changing to steam drive pumps. This will eliminate the electric cost, and the exhaust steam from the pumps may be used for heating hot water and for heating the buildings. Before making such a change, however, the fact must be considered that such machinery can operate only when high pressure steam is available. Institutions that bank their fires at night particularly in the summer, may find that the additional labor cost, provided a fireman is necessary during the entire night, would offset the savings in electric bills.

Large institutions should consider the feasibility of generating at least a part of their electric current. Whether or not it will be economical will depend on many elements. The investment is large but the savings may be proportionately as great. Many generator manufacturing companies are willing to install the equipment and receive their payment out of the savings.

The foregoing is a brief outline of the lines of attack that might be considered in planning a battle against the apparently fixed costs of heat, light and power. Obviously, the installation of additional power plant equipment should not be undertaken except with competent engineering advice from a person who understands thoroughly the needs of the particular institution.

I want to stress the importance of installing measuring devices to determine the hospital's consumption of heat, light and power. In most institutions power house costs mean practically nothing. The costs are known according to the ledgers, but when those costs are analyzed they are likely to include many items that have nothing to do with production.

The engineer usually serves also as chief maintenance man and yet his salary is charged entirely against the boiler room. In one large institution all mechanical replacement is charged against the boiler room. The so-called chief engineer in this institution is actually the superintendent of the

building and grounds. The plumbers, electricians, painters and the boiler room force are all under his direction. Obviously his full time should not be charged against the boiler room.

Certain measuring devices are absolutely essential to efficient operation of the boiler room. Suppose the hospital knew the total cost of its raw foods, but did not know how many meals were served. That is exactly the condition found in the average boiler room. It generally is not known how many pounds of steam are produced. The superintendent knows exactly how many meals are given to patients, how many meals are given to nurses, how many meals are given to help and to guests, but few superintendents know how many pounds of steam or how many gallons of hot water are used in the hospital building, in the nurses' home and in the laundry—yet the power house costs are nearly as large as the food costs. With such data available the superintendent is in a position to proceed further.

"The number of pounds of steam divided by the number of pounds of coal used tell an interesting and valuable story of steam production costs. The success of attempts to economize in consumption may be determined at any time by comparing the degree days per month with the number of pounds of steam used. One month can then be compared with another. If the steam consumption for degree days shows no effect of the economy measures, then an investigation is warranted.

Another Measuring Stick

Water consumption should naturally bear some relation to the number of patients, the number of employees and the number of nurses. No complete statistics are available to indicate what the water consumption should be a day per patient. As a comparison with the 400 gallons of hot water a day per patient cited in the early part of this article, I find that a recognized authority estimates that the average hotel will not use over 100 gallons of hot water a day per guest. A comparison of hot water consumption from month to month will be useful in pointing the way to more vigorous attacks on this problem.

Another way to measure success in the battle for economy is to make a comparison of operating statements. But the superintendent will not know a great deal about this matter until he knows how much it costs to produce a pound of steam; how much steam is used, and for what purpose; what it costs to light and power the building, and for what purpose the light and power are used, and what it costs for hot and cold water, and how they are used. If these data were made available to the superintendent weekly or monthly they should re-



**GRACE! YOU LOOK
BETTER THAN EVER**

"Why shouldn't I? Haven't I been getting the best of food and lots of sleep? But there's more to it than that, I'll admit. I've been getting my regular beauty treatments ever since I've been here!"

"You mean massages and that sort of thing?"

"Good heavens no, Bill! My Palmolive beauty treatments! Palmolive is the only soap I can use, and what a relief to find it here. It's one of those little things, but believe me Palmolive means a lot to my skin. And the nurse tells me it means a lot to most every woman!"

COLGATE-PALMOLIVE-PEET COMPANY

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COLGATE-PALMOLIVE-PEET COMPANY

Dept. 20-M, Palmolive Building, Chicago

Without obligation send me your free booklet "BUILDING CLEANLINESS MAINTENANCE"—together with Palmolive Soap prices.

Name..... Address.....

Hospital..... Position.....

City..... State.....

MEN, too, like the cool green color of Palmolive . . . the olive oil green that is Nature's own beauty trade-mark. Each cake of Palmolive contains olive and palm oils . . . the centuries-old ingredients that make skin soft, smooth. No bleaches, no artificial colors. Just the natural green of olive oil makes Palmolive green.

Supply your patients with Palmolive. In spite of its prestige it costs no more than ordinary soaps! We will gladly send you, upon request, a copy of our new free booklet and prices of Palmolive in five special sizes. Your hospital's name on the wrappers with orders of 1000 cakes or more.



*This much olive oil goes
into the making of
every cake of Palmolive*

sult in interesting discussions with his department heads, who should be required to explain any increase in consumption that may have occurred in their departments. But until these figures are available, or at least the basic figures, that is, the production in the power house and the number of kilowatt hours of electricity used, it will be extremely difficult to measure the results of the economy battle.

The attack on consumption requires the enthusiastic cooperation of the entire personnel—the attack on production requires only the active cooperation of the boiler room force. Neither attack will succeed without the help of the other. The objective must be determined by the individual superintendent, but I do not believe I am setting it too high to say that 20 per cent might be cut from present costs in most institutions.¹

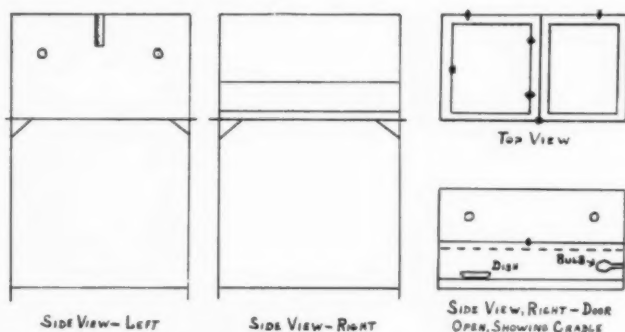
Your Carpenter Can Make This Reliable Incubator

By JOSEPH ERNEST MOTT, M.D.

Resident Physician, Paterson General Hospital,
Paterson, N. J.

In any hospital with a maternity service there comes a time when an incubator is needed. The majority of incubators on the market are elaborate and expensive and do not lend themselves to the needs and budget of the average moderate sized hospital.

Incubators of all fashions may be readily improvised, but at best they are temporary and unreli-



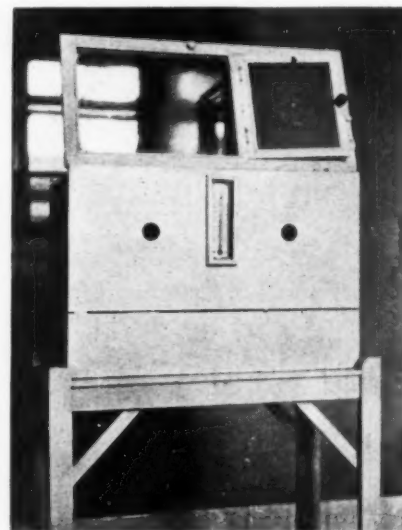
able. The Paterson General Hospital has designed an incubator that is inexpensive and can be constructed by the hospital carpenter. This incubator serves the purpose and has the features of a regulation manufactured product.

The apparatus is constructed entirely of wood. The temperature can be conveniently regulated, controlled and recorded, and the infant can be watched easily and given nursing care. The effi-

ciency of this incubator has been proved in actual use.

The incubator is built of $\frac{3}{4}$ -inch white pine. It is 2 feet long, 13 inches wide and 18 inches deep. The cradle for the infant's mattress is 6 inches from the bottom of the incubator. An ordinary electric light bulb is fitted under the cradle to supply heat. There are four vent holes, two on each side. The top of the incubator is made of glass. It is mounted on hinges so that half the top or the whole top may be opened for heat regulation

Four homemade incubators of this type are used in the maternity service at Paterson General Hospital. This incubator may be made by the hospital carpenter.



and for changing and feeding the infant. An ordinary wall thermometer built in the side of the unit records the temperature. Half of one side opens on hinges so that the light bulb can be reached easily, and water can be placed under the cradle for moisture.

The whole apparatus is mounted on a stand 2 feet 6 inches high, and when painted white is an attractive piece of equipment.

Four incubators of this type are in use at the Paterson General Hospital. They are in use almost constantly and have aided many premature births, as the following examples illustrate:

A premature infant that weighed 3 pounds 11½ ounces at birth—six months, three weeks' gestation—was kept in one of the incubators for nine weeks. When removed it was taking feeding well and weighed five pounds. Eight weeks after discharge from the hospital this infant weighed 13 pounds, or approximately the normal weight for a three months' old baby.

Another infant weighed two pounds and eleven ounces on delivery. It was delivered after manual dilatation of the cervix from an eclamptic mother. The infant was kept in one of the incubators for eleven weeks, and its weight increased to 5 pounds and 11 ounces. The infant was discharged ten days later weighing six pounds and one ounce.

¹Read at the convention of Illinois, Indiana and Wisconsin Hospital Associations, Chicago.

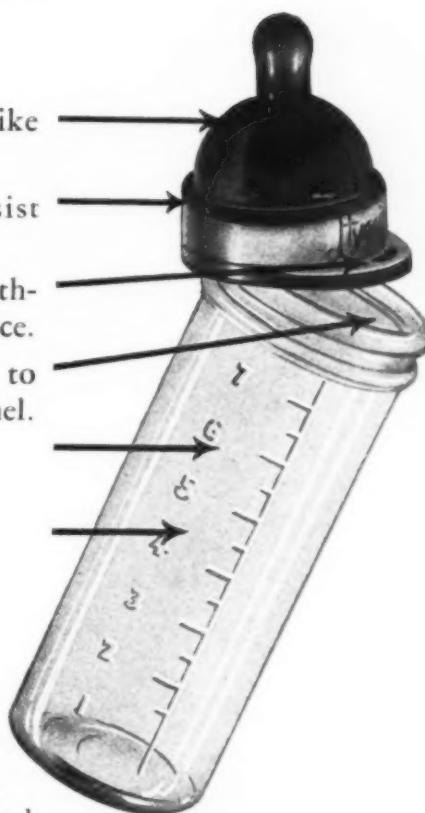
6 REASONS

for using

HYGEIA

BOTTLES AND NIPPLES

- 1 Hygeia Breast Nipple—shaped like mother's breast.
- 2 Patented reinforced base to resist nipple collapsing.
- 3 Patented tab allows handling without touching sterilized inner surface.
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- 5 Smooth, rounded inner surface.
- 6 Finest glass—stands repeated boiling. Guaranteed.



ONLY Hygeia Nipples and Bottles contain all these features. They assure three things: (1) Greater certainty of cleanliness. (2) Time saved at each preparation of the child's formula. (3) A more contented nursing baby.

Sample Hygeia Bottles and Nipples will be sent gladly to hospitals. Write for special hospital discounts to Hygeia Nursing Bottle Company, 197 Van Rensselaer Street, Buffalo, N. Y.

Hygeia

THE safe NURSING BOTTLE

Dietetics and Institutional Food Service

Conducted by ANNA E. BOLLER, Central Free Dispensary at Rush Medical College, Chicago

Dietitian Plays an Important Part in Christmas Festivities

By ADA B. LOTHE

Supervising Dietitian, Milwaukee County Institutions, Milwaukee

CHRISTMAS plans are formulated early at Milwaukee County Institutions and requisitions for the special requirements centering around the holidays are sent to the administration office in September or October.

It is natural that a group of institutions having different reasons for existence do not have identical schemes, even though the fundamental aim may be the same. All of the seven institutions—Asylum for Chronic Insane, Blue Mound Preventorium, Dispensary-Emergency Hospital, Hospital for Mental Diseases, Hospital of the Milwaukee County Home for Dependent Children, Milwaukee County Hospital and Muirdale Sanatorium—make arrangements that coincide with their ideals.

A superlative stimulation is evident where children are found, and the Home for Dependent Children is indeed a happy place at Christmas time. Five hundred boys and girls are full of anticipation. Their Christmas program is excellent. Trees, gifts and all the festivities that gladden the heart of a normal child are in evidence. The same is true at Blue Mound Preventorium for tuberculous contact children. Muirdale Sanatorium has the same aim as the other institutions but the Christmas celebration for tuberculous patients must be especially planned and executed.

Patients of all types and ages are cared for in the Milwaukee County Institutions, varying from the young child to the old and infirm, the physically well to the physically handicapped, the mentally alert to the mentally sick. All stages of



academic background are also evident, varying from those who can neither read nor write to those who are university graduates.

Since it is impossible to go into detail regarding Christmas preparations at all of these institutions, I shall confine my description to plans that I have seen materialize at the Milwaukee County Hospital, an institution of 900 beds.

To those not closely associated with the inner workings of the hospital, the first intimation that Christmas was approaching came when the group of student nurses began practicing Christmas carols. Then odors emanating from the pastry kitchen suggested that fruit cakes were in the process of preparation. For years the fruit cake has been a traditional part of the employees' menu on Christmas night. During the week preceding the holiday various church and school groups brought their messages of cheer. The social service department cared for these schedules.

Visible activity began, of course, the day before Christmas when the various departments focused their contributions upon the wards. Lobby, wards

CHRISTMAS MENUS FOR GENERAL PATIENTS AND EMPLOYEES

Dinner

<i>General Patients</i>	<i>Employees</i>
Chicken Fricassee	Noodle Soup
Whipped Potatoes	Roast Goose
Lettuce Salad	Cranberry Sauce
Gelatin	Snowflake Potatoes
Bread and Butter	Christmas Salad
Coffee and Milk	Ice Cream and Cookies
	Bread and Butter
	Coffee, Milk and Tea

Supper

<i>General Patients</i>	<i>Employees</i>
Noodle Soup	Assorted Cold Meats
Scrambled Eggs With Peas	Potato Salad
Canned Pears	Buttered Peas
Christmas Cookies	Fruit Cake
Bread and Butter	Bread and Butter
Coffee and Milk	Coffee and Milk

Try this
INVITING ANSWER
to the
"SPINACH PROBLEM"

NO DOUBT ABOUT IT, most dietitians do have a "spinach problem" . . . and not only in the Children's Ward either. So many special diets call for spinach, and so many patients are, to say the least, not enthusiastic.

Next time you're up against this difficulty, try the dish shown here. We think you'll find it a popular solution. It is tempting because of its novelty; satisfying because it is made with *Libby's Spinach*.

For Libby's Spinach has points that make it very definitely more attractive than ordinary kinds. Tender young leaves, washed absolutely free from sand and grit, are cooked under pressure within a few hours of picking. That way, both the delicate natural flavor and the important vitamins and minerals are protected.

You will find Libby's Spinach economical. It costs you no more, and full uniform pack, without waste, is assured. Patients and staff will enjoy its pleasing flavor and unusual delicacy.

Next time you order, make it *Libby's Spinach*. You can get it and other fine Libby Foods through your regular source of supply. Libby, McNeill & Libby, Dept. N-45, Welfare Bldg., Chicago.



SPINACH AND CHICKEN, shown above, is a suggestion for Diabetic and Anti-Constipation trays as well as for the general diet.

Recipe: Drain Libby's Spinach and chop fine. Season well with butter and a dash of nutmeg. Place in individual baking dish; make hole in center of spinach and fill with cubes of boiled chicken in cream sauce (for Diabetic trays, pure cream thickened with India gum). Heat in oven, and serve very hot.

Libby's 100 Foods

These Libby Foods of finest flavor are now packed in regular and special sizes for institutions:

Tomato Juice	Peas, Corn, Beets
Tomato Purée	Spinach, Kraut
Catchup, Chili Sauce	Pork and Beans
Hawaiian Pineapple	Jams, Jellies
California Fruits	Olives, Pickles
Red Raspberries	Mustard
Santa Clara Prunes	Bouillon Cubes
in Syrup	Beef Extract
Strawberries	Mince Meat
Loganberries	Boneless Chicken
California Asparagus	Salmon
Stringless Beans	Evaporated Milk



All food for the Christmas celebration is prepared in the main kitchen. The top picture shows the section of the kitchen where special diets are prepared. Below is a nourishment cart loaded with glasses of green and red beverages, to carry out the Christmas colors.



and dining rooms were decorated with flowering plants, poinsettias and Jerusalem cherries from the institutions' greenhouses. These and other simple decorations gave a festive appearance.

The lower salaried employees were notified by the social service department to call at the office before leaving for home on Christmas Eve. Each one was given a package containing gifts for the children in his family. Those responsible for the gifts did not desire to have their names given but had earlier received the information regarding the ages and number of children in these families. These gifts added much to the happiness in these homes where limited budgets did not allow much expenditure for children's playthings.

The children's floor received extra attention. The tree was important. The pastry kitchen had made gingerbread Santas for each child. Each Santa was about ten inches long and wide enough to extend slightly beyond the brightly colored picture that covered the head and the upper part of the body and the boots that covered the feet. In the space between the pictures fine lines of icing outlined the coat, showed the buttons and added other interesting touches. Some of the pictures were boys and girls, but the Santas were most popular. It was a real tragedy on the children's floor if one of the gingerbread goodies was broken accidentally. There were a few gifts—games, storybooks and dolls.

Each patient found a box of candy and nuts by his bedside Christmas morning. It probably

This useful, protective food *an ideal* HOSPITAL DISH

ALWAYS enjoyed by most patients—this colorful fruit with its tangy, tropical flavor. And it is *economical*, served as a Pineapple Cup, or in a portion of two slices—besides salads, desserts, dozens of delightful dishes that dietitians know.

But Canned Pineapple should not be used solely for its appetite appeal or its moderate cost. From the nutritional standpoint, too, it is ideal. Many dietetic benefits are furnished by small *daily* servings.

It has been shown by recent studies to be a good source of Vitamins A, B and C. Canned Pineapple supplies important minerals, calcium, phosphorus, copper, iron and manga-

nese. It raises the alkaline reserve of the blood for at least two hours after eating. In addition, this exceptional fruit speeds gastric digestion on proteins and stimulates renal function.

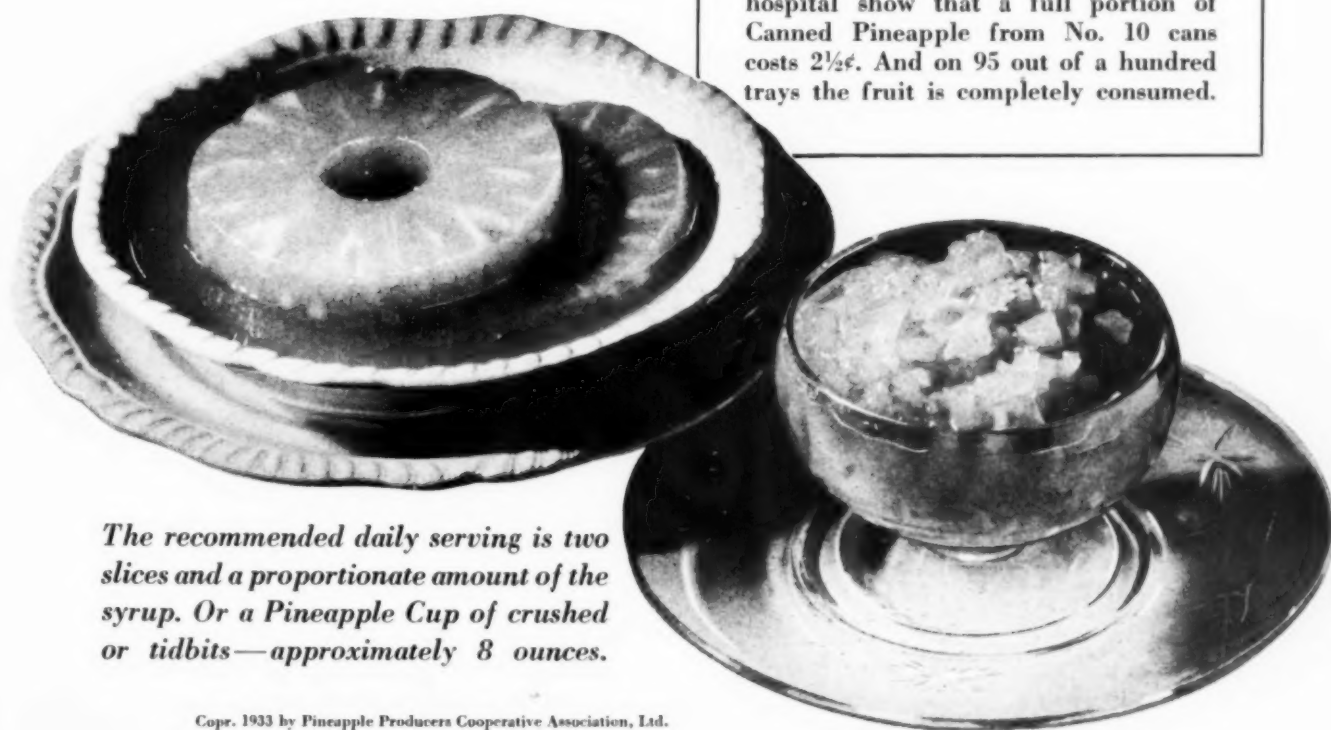
Consider the numerous advantages Canned Pineapple offers. Remember that it is recommended for *daily* use.

Educational Committee

Pineapple Producers Cooperative Association, Ltd.
100 Bush Street, San Francisco

**2½¢ per portion
95% consumed**

Figures from a leading San Francisco hospital show that a full portion of Canned Pineapple from No. 10 cans costs 2½¢. And on 95 out of a hundred trays the fruit is completely consumed.



The recommended daily serving is two slices and a proportionate amount of the syrup. Or a Pineapple Cup of crushed or tidbits—approximately 8 ounces.

wasn't discovered immediately upon awakening. Before breakfast the nurses with lighted candles in hand formed a procession and passed through the halls singing Christmas carols. This procedure has been followed for so many years that it has become traditional. Then came the candle-light breakfast in the nurses' dining room.

Sprays of holly or little Christmas trees made of evergreen sprays set in blocks of wood and covered with white cotton have been used to decorate trays. Another tray decoration is made of two pieces of firm green paper cut to represent a Christmas tree, stapled together and folded so that it stands erect. These paper trees with small pieces of tinsel rope also make attractive decorations for the dining room table.

Little cards of red, green or white cardboard decorated with Christmas seals and appropriate

greetings are inexpensive and attractive. It is thought, not cost, that has first appreciation. These little touches plus the fancy paper napkins, the special salads and menu have never failed, so far as I know, to please the patients.

Even the nourishment cart carried out the idea of Christmas when glasses of green lime beverage and red fruit punch were arranged on the top tray of the cart.

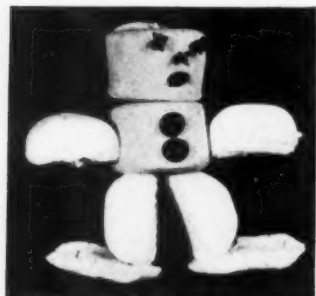
Christmas dinner was the important festivity of the day. Poultry is always the nucleus of the meal. Chicken fricassee is served to patients for the psychologic reason that the gravy makes it possible for more patients to share in the *pièce de résistance* of the Christmas feast. The only patients excluded are those on special diets and surgical service. Extra greetings and favors are placed on the trays for this class of patients.

Christmas in a Children's Hospital

Margaret Cowden, chief dietitian, Children's Memorial Hospital, Chicago, describes as follows the special plans that are made for the children's Christmas celebration in that institution:

Christmas preparations begin several weeks in advance when all the children write to Santa Claus asking him for

one or two presents. The school teachers help with the letters and see that each child's name, age and ward appear on the outside of the envelope. These letters are sent to Junior Auxiliary members who fill the requests as nearly as possible, packing the presents in large stockings which are made of red tarlatan. Other small, inex-



pensive gifts are added to fill the stockings which are then delivered to the wards and checked by the head nurses on the day before Christmas to be sure that each child is remembered and that the gifts are suitable.

A Holy Crèche that was given to the hospital some time ago is set up on a portable table and taken through the wards on the afternoon before Christmas. Usually some outside groups volunteer to sing carols so that Christmas Eve is celebrated with music. Early on Christmas morning the nurses and interns assemble and march through the halls singing carols. Each one carries a lighted candle and after the singing is finished they go to the dining room, place their candles in holders on the tables and dine by candlelight.

Breakfast is hurried, baths are hurried and by ten o'clock everyone is waiting for Santa Claus to arrive. The stockings have been packed in large laundry bags on each ward and Santa goes from one to another

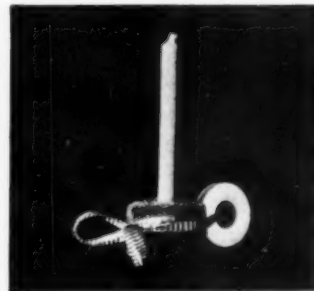
distributing the toys. Some of the doctors fill this rôle and add a great deal to the children's joy by speaking their names and joking with them. By the time the stockings are opened and the presents are admired the dinner hour has arrived.

We serve a turkey dinner with trimmings, Santa Claus molds of ice cream and fancy cookies cut in star or Santa Claus shapes with cherries, nuts or colored sugar on top. Fancy napkins are used for tray covers. After all, though, food is not the most important part of the day and the children are sometimes too excited to eat.

For favors we make marshmallow or snow men, candle holders and Christmas trees. A light wire hairpin is used as a foundation for the snow man. Marshmallows are cut in halves or thirds for arms and legs. Cloves are used for eyes, nose and buttons, while a cinnamon drop makes the mouth. The man will stand if allowed to dry for several days.

A gumdrop is used for the candle holder. A birthday candle is inserted in the center and a life saver candy is fastened to the gumdrop for a handle. Christmas tree favors are made by dipping the tips of tiny cedar twigs in silver or gilt paint. The twigs are then inserted in pill box or marshmallow bases. The pill boxes can be disguised with a bit of cotton.

After dinner visiting hours are observed and more presents arrive from home. By that time a little nap is in order. Even supper hardly distracts the children from their toys, but at an early hour the call for rest and sleep can be ignored no longer and the little ones are soon deep in slumber, dreaming of the marvelous and happy day just passed.



There is No Need for Expensive Forms of Baby Food

IN AN address before the American Dietetic Association in St. Louis (and reprinted in the Journal of the American Dietetic Association) Dr. McKim Marriott states:

"In applying the principles mentioned to the practical feeding of infants, a satisfactory formula for use during the first year is prepared by adding 3 ounces of sugar to one quart of milk. This provides the proper proportion between sugar and milk. The most satisfactory form of sugar, as well as the cheapest, is ordinary Karo corn syrup. This is the commercial food product

obtainable in grocery stores. It is a mixture of dextrin and maltose with some glucose and a little cane sugar. It is prepared by the hydrolysis of starch. The dextrin is not readily fermented by intestinal bacteria and the maltose and glucose are quickly absorbed. This form of sugar can be fed safely in somewhat larger amounts than cane sugar. It is at least as good as many of the prepared malt baby foods and far cheaper."

Every year brings a wider acceptance of Karo Syrup as an ideal food for infants—both in acid milk and whole milk formulas.

FREE TO PHYSICIANS!



Simple System of Dietary Accounts Serves as Constant Check

By FRANCES EUGENIE SAVILLE

Mineville, N. Y.

TO THE average dietitian the problem of accounts looms as big as a mountain. It is vitally necessary for her to keep some accounts so that she can be sure where she stands in relation to the budget. The average dietitian, however, has little time for accounts and certainly no time for complicated ones.

The scheme outlined in this article has been

worked out so that, with a minimum of effort, the dietitian can know at all times where she stands with each of her tradespeople and where she stands in relation to the budget. The scheme has been proved satisfactory and nearly foolproof. The necessary equipment is neither extensive nor expensive. A column book with enough columns to take care of

all the tradespeople, an alphabetical file and an order book will suffice.

First let us consider the order book. This can be an ordinary cheap notebook. At the top of the page appears the date. Under each tradesman's name are listed the articles needed from him that day. If the price is standard or according to quotation it is listed at once; if it is current it is listed when the order is given. A check is put at the side of each article to show that the order has been given. If someone calls for an order in the absence of the dietitian it can be given at once from the book. The dietitian will know as soon as she takes up the book that the order has been given. An order received during her absence can be quickly and accurately checked for quantity and price. When daily orders have to be sent through the main office on a requisition sheet, a second check mark through the middle shows that the order has been copied on that sheet. This avoids duplication of orders.

Fig. 1 shows a typical page from such an order book. It shows at a glance that the meat, fish and vegetables have been ordered and listed on the requisition sheet to go to the main office, the eggs

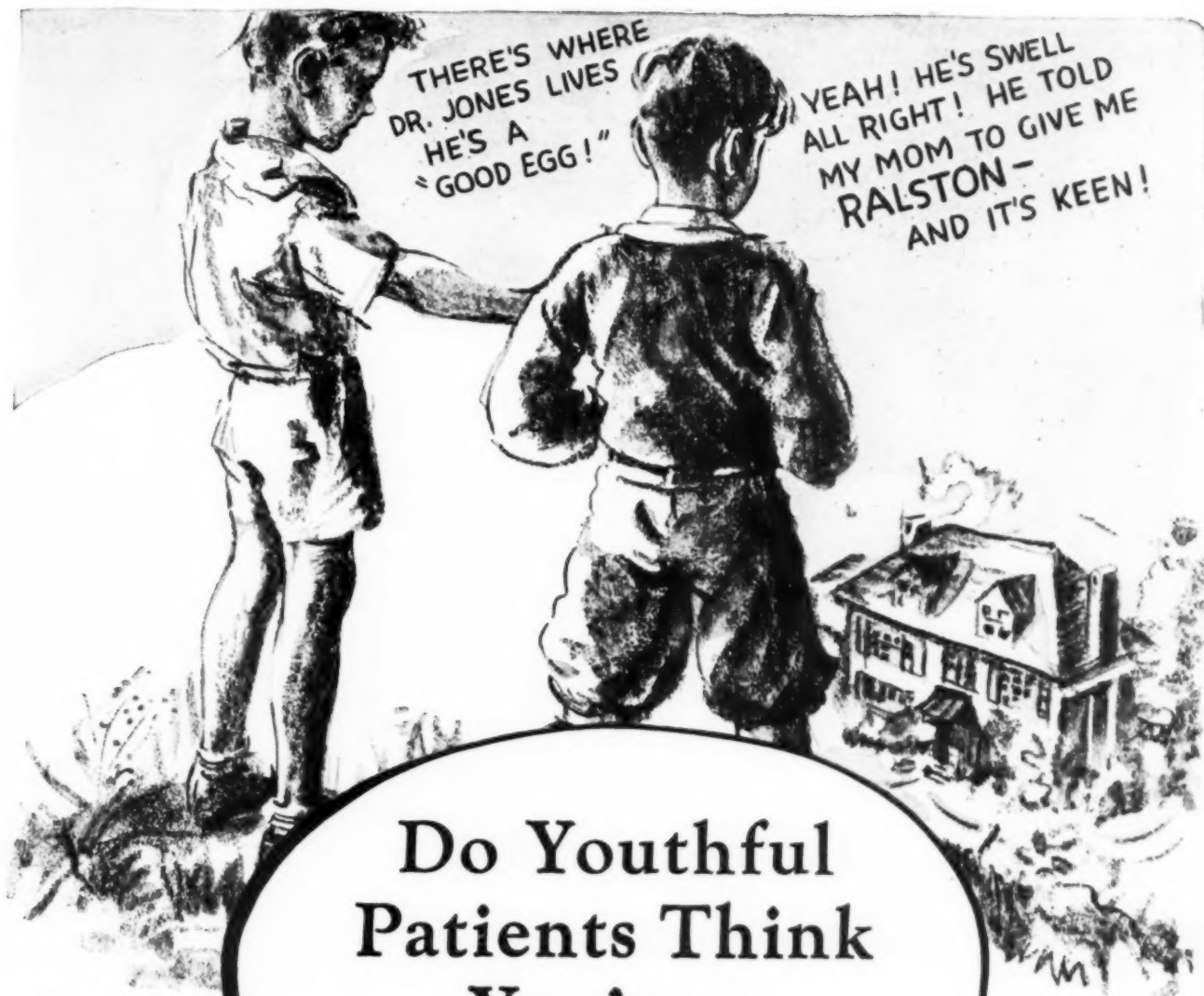
May 3, 1933	
Seeman	
✓ 1 top sirloin -	.19c
✓ 25# bacon -	.13c
✓ 8 smoked hams -	.13c
Freer	
✓ 2 1/2# asparagus -	\$2.25
✓ 1 1/2# tomatoes -	\$3.25
✓ 2 lbs greenings -	\$1.50
Fulton	
✓ 12 strings clams -	.12c
✓ 100 medium clams -	\$1.75
✓ 110# head (cut) -	.05c
✓ 20# shrimp -	.12c
Miller	
✓ 2 1/2# fancy fresh eggs -	.24c
✓ 1 1/2# western fresh eggs -	.22c
Breyer	
40 gals vanilla ice cream	

Fig. 1. Page from order book.

Meals											Petty	Spent	Cost
May	Today	To Date		Breyer	Freer	Fulton	Hayes	Jones	Miller	Seeman	Cash	Today	to Date
1	928	928	1		21.95			25.90		16.47		64.32	
2	941	1869	2		11.81		19.85					31.66	95.98
3	916	2785	3	14.80	10.75	11.91			21.00	16.39	.68	75.53	171.51
4	879	3664	4		27.40					35.82		63.22	234.73
5	881	4545	5	14.80	11.50	2.45		38.95				67.70	302.43
6	903												
7	909		7										
8	927		8										
9	961		9	16.85									
10	963		10										
11	980		11										
12	986		12										
13	972												
14	969		14										
15	972		15										
16			16										
17			17										
			18										
			19										

Fig. 2. A page from the column book. In the actual book, however, more columns will be necessary.

Fig. 2. A page from the column book. In the actual book, however, more columns will be necessary.



Do Youthful Patients Think You're a "GOOD EGG?"



DOESN'T it give you a "kick" to be more than just "doctor" to those young patients who are supposed to put physicians and the Spanish Inquisition in the same classification?

And aren't they a lot easier to treat successfully when they consider you a "regular fellow"?

Many physicians tell us that Ralston Wheat Cereal contributes materially in building up this "regular fellow" attitude on the part of children—especially in cases of anorexia. For Ralston, with its extra vitamin B, not only promotes normal appetites, but really tastes delicious. Naturally those child patients are glad to think you've hunted high and low for their special benefit to find something that's not only good for them but good to eat, too.



*Whole Wheat
Value—Double
Rich in Vitamin B*

Ralston Wheat Cereal is made of whole wheat (with only the coarser bran layer removed). Naturally rich in vitamin B—Ralston has been made double-rich by the addition of an extra quantity of wheat hearts. Ralston, with its abundance of the highly nutritious body-building elements, contains more vitamin B than any other cereal for growing children.

A Research Report on the new "double-rich" Ralston Wheat Cereal—and samples for testing—will be sent to you FREE. Use the coupon.

RALSTON PURINA COMPANY, Dept. I,
138 Checkerboard Square, St. Louis, Mo.

Please send me copy of your Research Report on the new Ralston Wheat Cereal and samples for testing.

Name

Address
This offer limited to residents of the United States

	Budget	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average	Pro- posed New Budget
Meat.....	1083.33	962.77	939.57	1014.46	966.47	937.35	993.59	994.25	908.86	870.31	867.02	877.10	742.92	922.88	925.00
Fruits and Vegetables...	666.66	629.87	635.16	701.31	715.39	855.20	887.55	838.16	744.91	659.55	574.55	600.17	612.64	721.21	725.00
Eggs.....	300.00	245.10	196.80	202.80	190.50	144.10	181.20	200.90	206.10	270.00	295.70	329.40	302.70	230.44	230.00
Milk.....	750.00	638.09	510.92	568.06	498.07	511.70	535.42	469.28	444.63	436.44	456.98	445.17	501.22	501.33	525.00
Bread.....	250.00	247.83	236.27	264.22	257.92	239.78	239.81	249.60	227.63	229.75	247.62	244.68	220.95	242.17	245.00
Groceries.....	700.00	287.71	499.85	725.66	411.54	358.91	891.56	474.30	417.69	549.73	723.31	273.79	547.36	514.28	520.00
Ice.....	150.00	114.75	82.25	73.50	130.50	151.75	195.00	221.00	235.50	203.75	149.50	111.00	87.46	146.33	150.00
Butter.....	300.00	242.79	283.44	248.32	215.91	256.65	176.05	185.67	236.73	195.63	224.27	260.33	201.51	227.28	230.00
Total.....	4200.00	3368.91	3384.26	3798.93	3386.30	3505.54	4100.18	3633.16	3422.04	3415.16	3538.95	3141.64	3216.76	.....	3500.00
Monthly Balance.....		831.09	815.74	401.07	813.70	694.46	99.82	566.84	777.96	784.84	661.05	1058.36	983.24	707.35	.....
Total Balance.....			1646.83	2047.90	2861.60	3556.06	3655.88	4222.72	5000.68	5785.52	6446.57	7504.93	8488.17	.....	.....
Pay Roll.....	975.00	963.68	943.97	908.88	905.00	905.00	932.87	959.58	950.32	941.98	910.25	917.00	918.63	929.76	950.00
Monthly Balance.....		11.32	31.03	66.12	70.00	70.00	42.13	15.42	24.68	33.02	64.75	58.00	56.37	45.23	.....
Total Balance.....			42.35	108.37	178.37	248.37	290.50	305.92	330.60	363.62	428.37	486.37	542.74	.....	.....
Grand Total.....		842.41	1689.18	2156.27	3039.97	3804.43	3946.38	4528.64	5331.28	6149.14	6874.94	7991.30	9030.91	.....	.....

Fig. 3. A report for the year. The monthly expenditures for commodities are secured from the column book.

have been ordered but not so listed and the ice cream order is still to be given.

Fig. 2 shows a page from the column book. In the actual book more columns will be necessary but the illustration shows the principle of the system. The first section of the page shows the number of meals served. In many instances it would be better to use more columns to show the meals served to staff and to the different types of patients. As illustrated the second column shows a total of the first column. Thus on May 5, 881 meals were served and so far in May 4,545 meals had been served. The dates follow consecutively in this column. When we go on to the next column we find that some dates are skipped, that is, a red line shows when Sunday comes. We see that this month started on Tuesday.

When a shipment is received the bill is left and the amount of that bill is listed under the proper heading and on the proper date. Thus, the order for eggs from Miller was received on the third and the total amount was \$21. On that day we spent a total of \$75.53 and up to the end of that day we had spent \$171.51. To find the cost per meal for that time, we would divide that figure by the number of meals to date, or 2,785.

It is easy to ascertain how much we owe any firm by adding the column under the firm's heading. At the end of the month all these columns are added and if the total corresponds with the statement from the firm, the daily bills can be clipped

to the statement which is then approved and the work of checking is done. If our figures and the statement do not correspond it is easy to see where the difference is and a back check can be obtained from the bill and the order book. The alphabetical file has taken care of the bills which have been filed in order as they were entered in the book.

Fig. 3 shows a concentrated report for the year. From the column book we get the amount spent every month for the different commodities. These are entered on this sheet or space might be taken in the back of the column book. The red figures at the left show the budget and the others show what has actually been spent. An average of the twelve months gives us a figure for the new budget.

The total time spent keeping accounts this way is less than the amount usually spent checking bills the last of the month. This system serves as a constant check on the budget.

Much can be learned from an analysis of the sheet shown in Fig. 3. The figures indicate that there was no uniformity in the ordering of groceries. This should be corrected. The average for this item was much under the budget which can be cut for next year. The figure for fruits is over the budget indicating that that figure should be raised for next year. This difference in figures can be traced to the fact that the dietitian uses more fresh fruits and vegetables and less canned food than the budget calls for. A check will show why the biggest saving was made in milk.

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ARMOUR LABORATORIES, CHICAGO, U. S. A.

HEADQUARTERS FOR MEDICAL SUPPLIES OF ANIMAL ORIGIN

December Dinner Menus

By WINIFRED HOWARD ERICKSON

Director of Dietetics, Ancker Hospital, St. Paul, Minn.

Day	Appetizer or Soup	Meat or Substitute	Potato or Substitute	Vegetable	Salad or Relish	Dessert
1.	Spiced Tomato Bouillon	Baked Fish, Tartar Sauce	Creamed Parsley Potatoes	Spinach With Sliced Egg	Iced Raw Carrot Strips	Prune Whip, Whipped Cream
2.	Chicken Soup	Hamburg Patties With Gravy, Chili Sauce	Baked Stuffed Potatoes		Cabbage and Green Pepper Salad	Peach Ice Cream, Drop Cookies
3.	Fruit Cup	Chicken Pie	Mashed Sweet	Buttered Green Beans	Cranberry Gelatin	Floating Island
4.	Beef Broth	Liver Loaf, Tomato Sauce	French Fried Potatoes	Creamed Onions	Chow-Chow	Baked Apples With Raisins
5.	Clear Soup, Parsley	Breaded Veal Chops	Mashed Potatoes	Stewed Tomatoes	Spiced Gooseberries	Maple Nut Mold
6.	Oxtail Soup	Cabbage Stuffed With Lamb and Rice	Baked Squash on Shell	Lima Beans and Diced Celery, Cheese Sauce	Head Lettuce, French Dressing	Fruit Gelatin
7.	Vegetable Soup	Beef à la mode	Noodles	Buttered Green (canned) Asparagus	Cranberry and Orange Relish	Topsy-Turvy Cake (Apricots and Nuts), Whipped Cream
8.	Green Pea Soup	Creamed Chipped Beef on Toast		Braised Parsnips, Chopped Parsley	Perfection Salad	Orange Cream Pie
9.	Barley Broth	Sirloin Steak	Potatoes au Gratin	Harvard Beets	Iced Celery Hearts	Fruit Cup, Shredded Coconut
10.	Okra Soup	Roast Leg of Lamb, Mint Sauce	Mashed Potatoes	Braised Celery	Molded Fruit	Chocolate Chip Ice Cream, Cup Cakes
11.	Clear Tomato Soup	Baked Spareribs	Steamed Potatoes	Baked Sauerkraut	Crab Apple Pickles	French Rice Pudding
12.	Consommé	Pot Roast	Browned Potatoes		Vegetable Salad	Cherry Pie
13.	Beef Broth	Stuffed Pork Chops	Dressing	Escaloped Corn With Green Peppers	Beet Relish	Snow Pudding, Custard Sauce
14.	Julienne Soup	Shepherd's Pie		Stewed Tomatoes	Pickled Pears	Apple Brown Betty, Lemon Sauce
15.	Bean Soup	Egg Cutlets, Tomato Sauce	Hashed Brown Potatoes		Red Apple and Celery Salad	Graham Cracker Torte, Sauce
16.	Beet Soup	Veal Birds	Baked Sweet Potatoes	Buttered Wax Beans	Peach, Mayonnaise	Orange Ice, Macaroons
17.	Grapefruit (½), Cherry Garnish	Stewed Chicken With Gravy	Mashed Potatoes	Buttered Peas	Green Gelatin Salad, Grated Pineapple and Cheese, Whipped Cream	Chocolate Layer Cake With Date Filling, Chocolate Fudge Frosting
18.	Cream of Potato Soup	Little Pig Sausages	Spanish Rice	Buttered Asparagus		Baked Apples
19.	Consommé	Fried Chicken With Gravy	Potato Croquettes	Mashed Turnips	Beet Pickles	Pumpkin Custard
20.	Fish Chowder	Macaroni, Tomato and Cheese		Five-Minute Cabbage	Iced Celery Hearts, Sweet Pickles	Raisin Pie
21.	Onion Soup	Tenderloin Tips With Gravy	Buttered Parsley Potatoes		Pickled Carrots	Fruit Fritters, Hot Cherry Sauce
22.	Split Pea Soup	Baked Trout, Lemon	Potato Chips	Mashed Squash	Dill Pickles	Grapenut Custard
23.	Cream of Spinach Soup	Canadian Bacon and Fried Eggs	Baked Noodles		Tomato Aspic Salad	Peanut Brittle Ice Cream
24.	Oyster Stew	Spanish Steak With Gravy	Browned Potatoes	Cole Slaw	Spiced Cherries	Date Torte, Pour Cream
25.	Iced Tomato Juice, Slice of Lemon	Roast Turkey With Chestnut Dressing and Giblet Gravy	Mashed Potatoes	Mashed Rutabagas	Peach Pickles, Cranberry Ice, Grapefruit and Orange Salad With Pomegranate Seeds	Plum Pudding, Foamy Sauce
26.	Beef Broth	Fried Salt Pork With Country Gravy	Baked Potatoes or Corn Fritters		Spiced Apple Sauce	Three-in-One Sherbert, Poppy Seed Cake, Caramel Frosting
27.	Mulligatawny Soup	"City" Chicken With Gravy	Mashed Potatoes, Chopped Parsley	Braised Carrots	Olives and Celery	Peach Tapioca
28.	Corn Chowder	Rib Roast of Beef	Franconia Potatoes	Buttered String Beans	Head Lettuce Salad, Russian Dressing	Whipped Gelatin
29.	Spiced Tomato Soup	Tuna Fish, Noodle Loaf and Almonds, Asparagus Sauce		Green Peas	Raw Carrot and Raisin Salad	Caramel Blanmange
30.	Ham Shank and Bean Soup	Chicken à la King	Baking Powder Biscuits	Buttered Asparagus	Molded Cranberry Salad	Vanilla Ice Cream, Strawberry Preserves
31.	Chicken Rice Soup	Baked Ham With Raisin Gravy	Mashed Sweet Potatoes	Spinach With Sliced Lemon	Glazed Pineapple Rings	Chocolate Bread Pudding, Hard Sauce



I Didn't Know There Was A Place in the World Like This

(The facts on which this story is based were furnished by Mr. Robert Jolly, President-Elect A.H.A.)

Silhouetted against a late afternoon sun the little group trudged its way up the gravelled path to the door of the hospital. Six of them. Father, mother, and four children. Wearily the man held up a wheezing, whimpering infant to the Superintendent and begged him to do something. Two days before a grain of popcorn had lodged in the child's throat.

Backwoods folks they were, poorly clad, uneducated, but a simple child-like faith — unusual in these days — had carried them a hundred and twenty miles across country to a hospital.

~ ~ ~

Calmly facing calamity themselves our hospitals have met the needs of the times with untiring devotion to the highest principles of humanity, and an altruistic service too broad to be confined within the limits of any predetermined policy.

In an age unbalanced, such things we need to bring us back again to a faith in each other and society as a whole.

Deft handling of modern instruments removed the offending grain and the little baby was soon tucked into a crib under a nurse's care. The rest of the family also were cared for at the hospital until the next evening when the baby was restored to its joyful mother.

Later, that night, a train rushing northward carried a happy family. In silence the man watched the woman as she held her sleeping baby close. Suddenly a tear rolled down his weather beaten cheek. A soil-stained hand stretched out and patted his wife's knee. "Think of it, Ma! Them not chargin' us a penny and then payin' our fare home, into the bargain. It don't sound possible. I didn't know there was a place in the world like that!"

WILL ROSS, INC., Wholesale Hospital Supplies, 779-783 N. Water St., Milwaukee, Wis.

NEWS OF THE MONTH

Funds for Hospital Building Projects Still Available From P.W.A.; Procedure Is Outlined

Funds are still available for loans from the federal public works administration on hospital building projects. When the present appropriation is exhausted, there is at least a reasonable chance that Congress will make an additional appropriation. To clarify the procedure regarding such loans the following information has been gathered from official bulletins:

What types of hospitals are eligible to borrow from P. W. A.? Public bodies, cities, counties and states, may not only borrow but may receive grants of 30 per cent of the cost of constructing public hospitals. Nongovernmental hospitals, when devoted to the public use (that is, nonprofit) and when supported fully or in part by public funds may make loans but cannot be given outright grants. The loans must be self-liquidating in character.

When must the loans to nongovernmental hospitals be repaid? No loans will be made to private corporations for a period of more than ten years but if the revenues of the project indicate the ability to refinance in a normal money market at the end of ten years, only 50 per cent of the loan need be amortized in the ten years and the remainder can be refinanced.

What interest rate is charged? Rate of interest is determined for each loan separately, but pending such determination "the applicant should use 5 per cent."

What is meant by "self-liquidating in character"? The project must earn

sufficient net revenue to pay interest and retire outstanding indebtedness, including the loan, within the conservatively estimated life of the structures that constitute the project. If the project is an extension to an existing enterprise, then either the revenues of the new project must be sufficient to carry the indebtedness or the enterprise as a whole must be able to do so.

With whom must applications be filed? Four complete copies of the application and accompanying papers and drawings should be submitted to the state advisory board.

What should application include? This application should give the following information: name of applicant, address, names of representative, attorney and engineer or architect, population of community in 1910, 1920 and 1930; amount of loan requested with security offered, dates of payment and dates when funds are needed; a complete description of the project and its cost, with plans, specifications and technical reports; revenue and expense statement of the applicant for last three years; complete financial data regarding the applicant, and complete legal data regarding the applicant and the project. (Detailed specifications regarding applications are given in Circular No. 3 of the Federal Emergency Administration of Public Works.)

What are the advantages of P. W. A. loans? Relatively long term for repay-

ment, low interest rate, lower construction costs now than later, cooperation with the President in recovery.

What are the disadvantages? Labor policy specifies hours, wages, open bidding on contracts, employment of local persons when qualified. Secretary of Interior Ickes' determination to prevent grafting and waste entails great detail in applications and close supervision of work. Some subordinates have exercised hair splitting propensities in reviewing legal data.

When must applications be submitted? As soon as possible for two reasons, first, the present appropriation is approaching exhaustion and may not be renewed; second, building costs have been advancing rapidly since May.

Up to October 21 P. W. A. allotments for twenty-nine hospitals and institutions totaled \$10,410,651 and for three hospital dormitories, \$2,471,500.

Memphis Given \$400,000 to Erect New Hospital

A donation of \$400,000 towards a \$1,000,000 general hospital has been accepted by the city of Memphis, Tenn., from the trustees of the Theresa Gaston Mann estate.

The only stipulation made by the trustees in giving the \$400,000 to the city was that the institution should be called the John Gaston Hospital, and that a charity ward should be opened for residents of Tennessee, Arkansas and Mississippi. Provision was made for income for maintenance of the charity ward.

The amount to be added by the city to the Gaston money for the hospital is indefinite, and depends on the sum the federal public works administration will give the city for the hospital. The city has already appropriated \$170,000 for the institution and the county has agreed to give \$100,000.

Plans for the hospital will call for 300 beds, according to Mayor Overton of Memphis. Walter F. Schulz, architect, has been commissioned to prepare plans and specifications. Most of the money will go into a new main building. A modern children's hospital, a maternity ward and a nurses' home will be part of the hospital group.

Iowa Dietetic Group Holds Meeting

The Iowa State Dietetic Association held its semiannual meeting at Des Moines on November 3. Dr. W. D. Abbott, Des Moines, spoke on "Ketogenic Diets in Migraine Headaches and Brain Surgery," and Priscilla Wayne addressed the gathering on the subject of soup kitchens.

Caroline Kendall, University of Iowa Hospital, Iowa City, read a paper on "Iron Utilization at a High Level in the Intestines."

Amy Standing, Iowa Methodist Hospital, Des Moines, was appointed treasurer of the association, succeeding Evelyn Fresk.

Bellevue Opens New Psychiatric Unit

The new Bellevue Psychiatric Hospital, unit of Bellevue Hospital, New York City, has been formally dedicated. The hospital, which was erected at a cost of \$3,000,000, was completed last May.

*

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PROMPT ATTENTION GIVEN TO PHYSICIANS' INQUIRIES

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NEWS OF THE MONTH

Hospital Council Is Needed in Chicago, Special Committee Points Out in Report

The formation of a hospital council in Chicago is strongly recommended in a preliminary report presented recently by a committee of the Chicago Hospital Association. "We have reached a point where hospitals have gone as far as they can by themselves in solving many of the problems which they are facing," the report says. "Any further attempts to solve the problems created in these trying times should lie in the direction of cooperative or group efforts of hospitals."

After reviewing the functions that a hospital council might perform and the organization it should have, the report concludes "the whole question resolves itself into the proposition that

Chicago needs a central voluntary body or a hospital council to coordinate and correlate the services and programs dealing with the care of the sick and to serve the hospitals, not through any official power or authority, but through the confidence inspired by the reasonableness of the measures it advocates."

The committee, which was asked to continue its study, is composed of Maurice Dubin, Mount Sinai Hospital, chairman; Asa S. Bacon, Presbyterian Hospital; Father John W. Barrett, diocesan director of Catholic hospitals; John C. Dinsmore, University of Chicago Clinics, and E. E. Hanson, Lutheran Deaconess Home and Hospital.

New England Hospital Association Will Meet

The New England Hospital Association will hold its twelfth annual meeting on February 16 and 17. The meeting will be held at the University Club, Boston.

Scott Whitcher, St. Luke's Hospital, New Bedford, Mass., is president of the association. The secretary-treasurer is Albert G. Engelbach, Massachusetts General Hospital, Boston.

New Ruling Rendered on Illinois Sales Tax

A new ruling on the application of the state sales tax to hospitals has been obtained by the Chicago and Illinois hospital associations. Sales taxes are in effect in seventeen states.

According to the new ruling the hospital will be regarded as a consumer, and thereby relieved from the duty of collecting a sales tax, for all transactions which are directly and primarily concerned with the giving of hospital service. The hospital will have to report sales and pay a tax only on those transactions that are primarily sales of products. Examples of the latter transactions are the sale of medicines or supplies to physicians and the sale of meals to guests of patients.

It is pointed out that it will be practically impossible for the hospitals to keep sufficiently accurate records of such sales to avoid paying the tax twice, once on the purchase and once on the sale. Nevertheless the new ruling is considered a decided advance over previous decisions.

U. of C. Health Service Expands Its Benefits

Two extensions of benefits under its periodic payment plan for employees and faculty members were granted on November 15 by the University of Chicago Clinics Health Service. These were made possible by the reduced cost per patient visit since July 1.

The increases of benefits are:

1. The health service will hereafter include dental work and will pay for dental x-rays obtained at its request from the dental clinic. Heretofore participants have had to pay these fees themselves.

2. The number of days of hospitalization to which the member is entitled has been increased from twenty-eight to sixty.

Under present arrangements one physician is assigned to the University Clinics Health Service. Patients may upon request have consultations with any other member of the Uni-

versity of Chicago Clinics staff. If, however, they wish treatments from someone other than the regularly assigned physician they must obtain special permission in order to receive the service under their membership contract.

New Legislation Helps Pennsylvania Hospitals

Pennsylvania hospitals will benefit by \$2,231,365 from the passage at the recent election of Amendment No. 8 to the state constitution authorizing the state to issue \$25,000,000 of bonds for unemployment relief and assistance to educational institutions and hospitals. A total of 163 hospitals will receive payment from these funds to recompense them for care of indigent patients.

Passage of the amendment reflects, in part at least, the results of an energetic campaign conducted by the publicity committee of the Hospital Association of Pennsylvania. Under the chairmanship of M. H. Eichenlaub, this committee prepared newspaper and mail publicity, organized the hospitals to carry on direct and indirect promotion, arranged public meetings to present the need of hospitals for these funds, and organized the hospital supply firms to lend their efforts.

P. W. A. Allots \$300,000 for Wisconsin Hospital

The application of Brown County, Wisconsin, for an allotment of \$300,000 with which to construct a new hospital for the chronic mentally ill was approved recently by the federal public works administration. The proposed structure will be erected at Green Bay and will replace the present Brown County Asylum.

The administration's action made 30 per cent of the cost of labor and materials an outright gift, and the balance a loan to be secured by general obligation bonds. The estimated cost of labor and materials is \$235,000, which would make the amount of the outright grant approximately \$70,500.

The new structure will be designed to accommodate 250 patients.

Has this Leading Hospital's experience also been yours?

The Director of the Pharmaceutical Department of a leading hospital in Washington, D. C., wrote the following letter to the makers of "Lysol" not long ago:

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"The reason why we used the other preparation so long was that it was less expensive. We received a circular explaining to us the merits of "Lysol" and we decided to

give it a trial, as the *new price of "Lysol"* to hospitals was about the same as the other. "Lysol" has proved to be a far better product.

"I am not writing this letter for advertising, but I just wanted you to know that in my opinion, formed from actual experience, "Lysol" is the only disinfectant that proves satisfactory."

He did not write us for advertising! But we wrote him and asked him if we might publish his letter. He gave us permission gladly, "because I really believe in your product."

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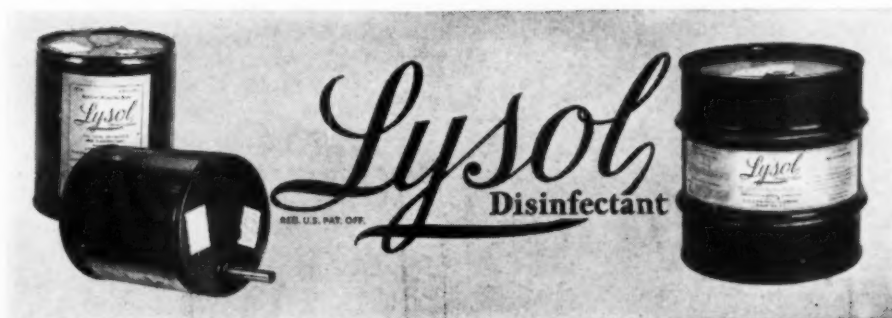
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NEWS OF THE MONTH

Colorado Holds Ninth Annual Meeting

The ninth annual meeting of the Colorado Hospital Association, held in Denver on November 15 and 16, was attended by nearly 200 persons.

Dr. John Andrew, Longmont Hospital, Longmont, was named president-elect of the association. Guy M. Hanner, superintendent, Beth-El Hospital, Colorado Springs, assumed the office of president for the ensuing year, succeeding Frank J. Walter, superintendent of St. Luke's Hospital, Denver. William S. McNary, University of Colorado School of Medicine and Hospitals, is executive secretary of the association.

The various section meetings and the banquet were successful from every standpoint. The feature of the banquet program was the address of President Walter. The motion picture, "Good Hospital Care," also aroused great interest.

Of particular interest on the Wednesday morning administrative program was the talk on "Hospital Public Relations," by Dr. Maurice H. Rees, dean and director, University of Colorado School of Medicine and Hospitals, Denver. Dr. I. D. Bronfin, medical director, National Jewish Hospital for Consumptives, Denver, delivered an excellent paper on "Protection of Employees in Tuberculosis Hospitals and Sanatoria."

A feature of the dietetic section was a paper by Dr. Thomas D. Cunningham, Denver, on "What Hospital Diets Should Contain." Mabel Humphrey, superintendent of nurses, St. Luke's Hospital, Denver, and Rosella Hanfeld, dietitian, Mercy Hospital, Denver, spoke on "Cooperation Between Nurses and Dietitians."

Hospital Installs New X-Ray Equipment

St. Francis Hospital, Trenton, N. J., has just completed the installation of complete new x-ray equipment. The new x-ray machine has a rating of 1,000 milliamperes of current at a voltage of 100,000 volts for radiographic work, and 10 milliamperes of current at 135,000 volts for treatment work.

The installation is arranged so that

complete radiographic, fluoroscopic or treatment work can be done in either of the two completely assembled radiographic rooms. These rooms are equipped with the latest x-ray tables and accessories so that no matter what type of radiographic work is desired the patient is ensured speedy and efficient attention.

St. Francis Hospital has also been equipped to care for persons who have had the misfortune of getting steel chips embedded in their eyes, which frequently happens among employees of industrial plants. By means of the newly installed eye localizer it is possible to show on an x-ray film the exact location and the depth of the steel chip. This helps the doctor to remove the foreign object with the least possible pain to the patient.

Hospital in New York Given \$30,000

New York Post-Graduate Hospital and Medical School, New York City, was awarded \$30,000 under the will of the late William Colgate. Twenty-two public institutions and organizations received \$1,936,886 under the terms of the will.

Hospitals Play Part in New York Hotel Exposition

Hospital interests were well represented at the hotel exposition in New York City during the week of November 13.

The women's day program, which was conducted by the National Executive Housekeepers' Association, included an address by May A. Middleton, superintendent, Methodist Episcopal Hospital, Philadelphia, who described the demands being made upon the hospital of today and how it is answering them.

Much interest centered too upon a fashion parade showing what the well dressed staff is wearing. The Presbyterian Hospital and the Hospital for Joint Diseases, New York City, among others, vied with the city's leading hotels in winning honors for the attractive uniforms that are worn by their personnel.

B. C. Hospital Group Meets in Victoria

The sixteenth annual convention of the British Columbia Hospitals' Association was held early in November at Victoria, B. C.

The matter of hospital finance occupied a leading place in the annual report of J. M. Coady, president of the association. It had, he said, been a trying year in the financing of hospitals, the problems being increased by the reduction of the government grant by \$225,000.

The problem of hospital finance was further considered at a later session, and various suggestions were offered for its solution. Among the suggestions were restoration of the government grant, an appeal for government sanction of sweepstakes, state health insurance, and various voluntary hospital insurance plans.

Among those who participated in the discussion were Charles McHardie, Nelson; E. W. Neel, Duncan; Dr. A. K. Haywood, Vancouver; Dr. G. Harvey Agnew, Toronto; Sister John Gabriel, Vancouver; W. H. Boothroyd, Alberni, and J. H. McVety, Vancouver.

Dr. Malcolm T. MacEachern, director of hospital activities, American College of Surgeons, took an active part in the convention proceedings. Doctor MacEachern delivered an address on hospital administration and conducted a round table on public relations.

Packer Hospital Receives \$425,000 From U. S. Fund

A grant of \$425,000 has been made by the federal public works administration to the Robert Packer Hospital, Sayre, Pa., for rebuilding a portion of the buildings which were destroyed by fire last May.

Under Title II of the National Industrial Recovery Act, "Public Works and Construction Projects," the types of projects eligible for grants and loans specifically includes "loans for the construction or completion of hospitals the operation of which is partly financed from public funds. . . ." Many nongovernmental hospitals in Pennsylvania, and in other states qualify under this clause because they are given state funds.

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rials that extend the limitations of therapeutics. For example, the Crane arm and leg whirlpool continuous flow bath. . . .

In it, the combination of heat and massage indicated in the treatment of peripheral nerve injuries, indolent ulcers, adherent scars, osteomyelitis of the terminal phalanges, and fractures is made absolutely dependable by mechanical means.

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Branches and Sales Offices in One Hundred and Sixty Cities

NEWS OF THE MONTH

Yale Nursing School Will Enroll College Grads Only

Beginning next year only college graduates or those who have equivalent training will be admitted to the Yale School of Nursing, according to the annual report of Dean Annie W. Goodrich. The Yale School of Nursing, it is said, is the first school of nursing in the world to make the completion of the college course an entrance requirement.

The school, which has just completed its tenth year, was the first school of nursing to be organized independently of a hospital or medical school, with the emphasis placed on nursing education in relation to preventive medicine. The part of public health nursing in the community health and welfare activities has been particularly stressed.

That such training was necessary in the field of nursing is attested by the positions which graduates of the school have secured during the past decade, it is pointed out. According to Dean Goodrich, graduates of the Yale School of Nursing, because of their broader and general preparation, are in constant demand. Despite the many thousands of unemployed nurses, it has not been possible for the school to respond to the requests for graduates for advanced positions in teaching and administration in both the institutional and public health fields.

Indianapolis Hospital Dedicates Health Beacon

Impressive ceremonies marked the dedication on November 9 of the new health beacon which rises on top of the Methodist Hospital, Indianapolis. Speakers included Arthur V. Brown, president of the board of trustees; Bishop Edgar Blake, Detroit; Alden B. Mills, managing editor, *The Modern Hospital*; Dr. William N. Wishard, dean of Indianapolis physicians; Dr. Harry B. Gough, DePauw University; Maxine Pemberton, graduate nurse of Methodist Hospital; Albert G. Hahn, Evansville, Ind.; Dr. N. E. Davis, secretary, Methodist Board of Hospitals, Columbus, Ohio, and Rev. W. W. Wiant, Dr. E. D. Clark and Dr. Jean S. Milner, all of Indianapolis.

The erection of the health beacon is but one of many steps taken by the Methodist hospitals of Indiana in their five-year new deal program. The four hospitals that have joined in this program are aiming for a reduction in hospital costs, the development of a department for incurables, and the removal of \$2,872,000 of indebtedness.

Funds for the program are to be raised through the stimulation of bequests, through the sale of life annuity contracts, the principal of which reverts to the hospitals on the death of the annuitant, and through the sale of service bonds which are redeemable at any time in hospital service to the bondholder or to persons designated by him.

The annuity contracts are to be insured by two old-line life insurance companies to make them absolutely sound. It is planned to carry on the campaign through the ministers of the state and give to them or their churches the commissions that would normally be paid to salesmen.

Purchasers of annuity contracts of \$5,000 or more will also be eligible for membership in the group hospitalization plan now in force for hospital employees.

Chicago Hospitals Petition for Lower Milk Rate

A petition to Secretary of Agriculture Wallace was filed in November by the Chicago Hospital Association requesting that since hospitals, orphanages, and old people's homes are "wholesale consumers" of milk and are charitable institutions, they be granted a lower price on their milk purchases than that demanded of commercial agencies.

In the Chicago milk code provision is made that relief agencies may purchase milk at \$0.06 less than the standard price. In its petition, however, the Chicago Hospital Association did not ask for as large a differential as this. It merely asked that the increase in price should be limited to that necessary to make up the increase that is going to the farmer.

The price of milk in Chicago has been raised under the code from \$0.22 per gallon to \$0.32 per gallon. Of the 10-cent increase 5.6 cents goes to the

farmer and the balance to the distributor. The Chicago Hospital Association therefore asked for a price of 27½ cents per gallon, "so as not to interfere with the program of the Agricultural Adjustment Administration."

Since the decision in this case is obviously of considerable importance to hospitals in all parts of the country, the Chicago Hospital Association has asked the American Hospital Association to carry on the appeal in Washington. This is made possible through the fact that the latter organization now has established a Washington representative.

Oregon Plans to Spend \$900,000 on New Hospitals

New hospitals in Oregon costing nearly \$900,000 are planned by the state reconstruction advisory board. This board, which was appointed by the governor to have jurisdiction of all requests from the state to the federal public works administration, has agreed to recommend a psychopathic hospital and a tuberculosis hospital in Portland, each of which will cost \$300,000, and a hospital for the criminal mentally ill and for use of the penitentiary, to be located in Salem and to cost \$290,000.

Definite application to federal authorities cannot be made until the state legislature has approved of the requests. The legislature has been called in special session by the governor and it is anticipated that approval will be given.

New Clinic Opened at Chicago Lying-in Hospital

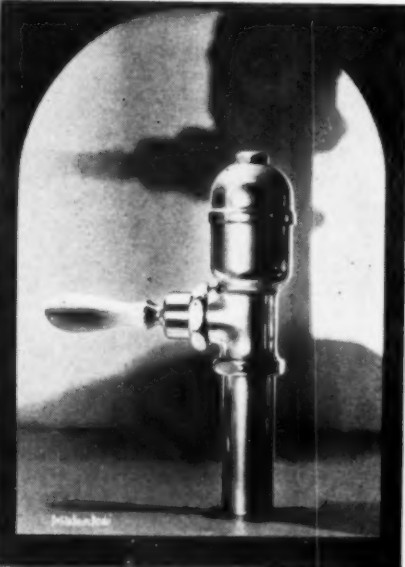
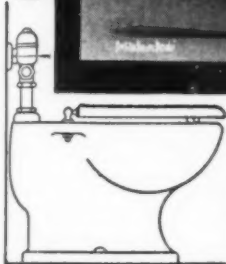
The facilities for the reception and examination of private and semiprivate patients at Chicago Lying-in Hospital, Chicago, have been increased by the addition of three examining rooms and a reception room on the first floor of the Mothers' Aid Pavilion.

The use of these rooms by the staff of the University of Chicago's department of obstetrics and gynecology will leave the present private clinic rooms in the main building of the Lying-in Hospital free for the use of the hospital's courtesy staff.

The background photograph

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The New perfected an integral more conv

To Any Mate
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one pair of
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SLOAN
FLUSH VALVES
FOR MODERN HOSPITALS

BUY...**Double Ball Bearing Swivel Shock Absorbing Casters**

We can't enumerate here all the superior qualities of these new casters—but any hospital executive who wants to improve his equipment, increase his patients' comfort, and save his hospital's money, will send for a set of these casters without delay.

These casters have two sets of hardened ball bearings. That's why they swivel with such indescribable ease. And every part of these casters is sturdily built—a guarantee of long wear.

Try a set of these better casters. We'll send them to you on approval. Just specify the size you want—2", 3", 4", or 5".

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The background of this illustration, made from an unretouched microscopic photograph magnified eight times normal, shows the Dermatized surface in comparison with ordinary rubber glove texture!

**... LOOK AT THIS
MATEX CALIBRATED DRAINS**

The New Matex Calibrated Drain is another ingenious innovation perfected by The Massillon Rubber Company. Calibrations are an integral part of the tubing. No guessing, forestalls waste, more convenient—made in all sizes. Ask for inspection samples.

Dermatizing

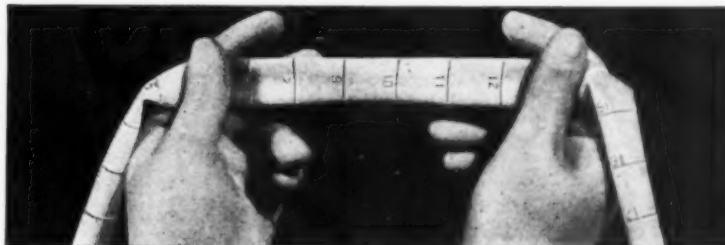
GIVES GLOVES A REAL VELVETY TOUCH.

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The New Matex Dermatized Glove is a revelation! Dermatizing imparts that "soft as velvet feel" with a natural tactile touch as positive as a steel-like grip.

Dermatizing banishes slipping, improves sensitivity! Millions of microscopic vacuum cups duplicate a "skin-like texture".

Thorough tests prove convincingly that Dermatized gloves are equal in strength, durability, non-ageing and sterilization resistance to Matex Anode (smooth), the quality standard glove of the world.



To Any Matex Dealer or
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For this coupon deliver to us free of charge
one pair of Matex Dermatized Gloves and
samples of Matex Calibrated Drains.

Hospital _____

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PERSONALS

MABEL F. WHEELER, formerly superintendent of Somerville Hospital, Somerville, Mass., is now superintendent of Gifford Memorial Hospital, Randolph, Vt., formerly the Randolph Sanatorium.

SISTER M. PADUA has been named to succeed SISTER M. CAMILLA as superintendent, St. Mary's Hospital, Galesburg, Ill. SISTER CAMILLA has been transferred to St. Mary's Hospital, Marquette, Mich., where she will replace SISTER M. MARTINA as superintendent.

DR. HENRY D. CHADWICK, tuberculosis controller, department of health, Detroit, since 1929, has been appointed commissioner of health of Massachusetts, succeeding DR. GEORGE H. BIGLOW, who resigned recently to become superintendent, Massachusetts General Hospital, Boston.

SISTER ALICE REGINA has been named superintendent, St. Mary's Hospital, Passaic, N. J., succeeding the late SISTER ROSE VINCENT.

RUTH LIBBY has been named superintendent of Cary Memorial Hospital, Caribou, Me., succeeding GERTRUDE GAHAGAN, who has been serving as acting superintendent for the past several months during the leave of absence of NELLIE C. DYSART, formerly superintendent of the hospital.

FRANK A. CROTHERS, formerly assistant superintendent of Springfield City Hospital, Springfield, Ohio, has been appointed acting superintendent of the institution.

WALTER W. N. RIGHTER has been elected superintendent of Presbyterian Hospital, Philadelphia. MR. RIGHTER is a graduate of Princeton University

and has been associated with the hospital for more than a year. He was elected assistant superintendent of the institution last January.

DR. JOHN M. PETERS has submitted his resignation as superintendent of Rhode Island Hospital, Providence, R. I., effective January 1. DOCTOR PETERS has been in charge of the institution for the past forty-four years. He recently celebrated his seventieth birthday. DR. WILLIAM O. RICE has been named acting superintendent.

HELEN MCBRIDE, superintendent of Princeton Hospital, Princeton, N. J., for the past two years, died November 6 after a month's illness.

JESSIE WILSON resigned on November 1 as superintendent of Northwest Texas Hospital, Amarillo, Tex. HARRY G. HATCH has been named acting superintendent.

ELSIE SMITH, who has been superintendent of Clarksdale Hospital, Clarksdale, Miss., since the founding of the institution ten years ago, has resigned.

JOHN W. THOMPSON, superintendent of Rochester Municipal Hospital, Rochester, N. Y., died suddenly on October 26, as a result of heart disease.

LEE S. LANPHER is the new superintendent of Lutheran Hospital, Cleveland, succeeding the late R. A. RYDEN. Prior to assuming his new position, MR. LANPHER had been assistant superintendent, Duval County Hospital, Jacksonville, Fla., since February 1, 1929. He has been an active member of the Florida Hospital Association.

DR. EDWARD F. DOMBROWSKI has been appointed superintendent of Chicago State Hospital, Dunning, Ill.

JOSEPHINE BLALOCK is the new superintendent of Chicago Memorial Hospital, Chicago, succeeding the late VALENTINE R. BOSWORTH. MISS BLALOCK has been associated with the institution since 1923.

MARIE CULLENBINE EYRICH was recently appointed superintendent of Schmidt Memorial Hospital, Beardstown, Ill.

OSCAR OLSSON is the new superintendent of Contra Costa County Hospital, Martinez, Calif., succeeding WILLIAM A. HOUGH, who has resigned after serving as head of the institution for the past twenty-four years.

DR. EDWARD W. WHITNEY has been named superintendent of Northampton State Hospital for the Insane, Northampton, Mass., succeeding the late DR. THEODORE A. HOCH. DOCTOR WHITNEY has been assistant superintendent of the hospital since 1917, and has served as acting superintendent since DOCTOR HOCH's death.

DR. E. M. GREEN, superintendent of Harrisburg State Hospital, Harrisburg, Pa., has resigned his position. DOCTOR GREEN has been engaged in mental hospital service for forty-two years.

ORA S. CUTTING was recently appointed superintendent of Newark Hospital, Newark, N. Y., succeeding the late MABEL CLARK.

IRMELA M. WITKE was recently named superintendent of Parkview Hospital, Pueblo, Colo.

CORA L. WALTON, who has been acting superintendent of Peninsula General Hospital, Salisbury, Md., since June 1, was recently appointed superintendent of the hospital.

\$100,000 Goal Achieved by Paterson Hospital

The emergency financial campaign of Paterson General Hospital, Paterson, N. J., was closed recently with complete success, attaining its desired goal of \$100,000. This means, according to Edgar C. Hayhow, superintendent, that the hospital will be able to enter the new year "starting from

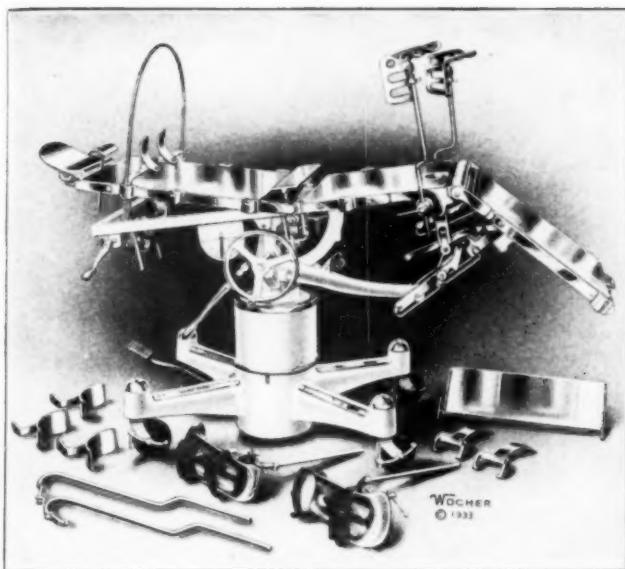
scratch" so far as debts are concerned.

The campaign organization consisted of 250 men and women, led by Dr. John C. McCoy, all of whom worked untiringly for the success of the undertaking.

The first subscriber to the campaign in the amount of \$15,000 was Grace L. Russell. Miss Russell was also the last subscriber with the last \$10,000 needed to achieve the desired goal of \$100,000.

Red Cross Revises Book on Home Hygiene

The American Red Cross textbook, "Home Hygiene and Care of the Sick," by Jane A. Delano, published originally in 1913, has been revised and reissued in a fourth edition. Special attention in the new edition has been paid to the newer aspects of preventive medicine, especially mental hygiene.



The PALMER Improved Operating Table AS MODERN AS TODAY!

A masterpiece of both mechanical and artistic design, this new table may well be termed an outstanding achievement in the manufacture of operating equipment.

The most striking feature, and one which wins the admiration of the severest critic, is the ease and speed with which the table may be taken through the entire series of operative positions.

Quietly and without visible effort on the part of the operator, this new table, so delicately balanced and perfectly proportioned, moves to attain the position best adapted to the technique of the surgeon.

Positive control permits this speed of motion with perfect safety.

The Palmer Table embraces features (both new and old) which have proven essential to operative technique and mechanical nicety. On the other hand many details which heretofore were classed as "necessary evils," have been eliminated.

Automatic extension of the leg section is an exclusive Palmer feature found on no other make of table. It is only one of the many refinements inherent in Wocher equipment.

Write to us today for further information

THE MAX WOCHER & SON CO.

Ries Lewis Operating Lights—Cassidy Mobile Dental Units

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TEXAS SURELY KNOWS ITS COTTON



The JOHN SEALY HOSPITAL Galveston, Texas

Texas is the biggest cotton growing state in the Union. An endorsement of the quality of Anchor Brand from that state is praise indeed. Therefore, we are very proud that the John Sealy Hospital of Galveston, Texas, is one of the many hospitals that has found satisfaction and economy in the use of

Dwight & Anchor

SHEETS & PILLOW CASES

A Nashua PRODUCT



Patients in hospitals all over the country enjoy the soft comfort of Anchor Brand. Superintendents appreciate its long wear.

Years of service have proved that its sturdy construction and tape-like selvage keep down replacement costs.

When next buying sheets or pillow cases specify Anchor Brand Sheets and Pillow Cases. You'll never regret it.



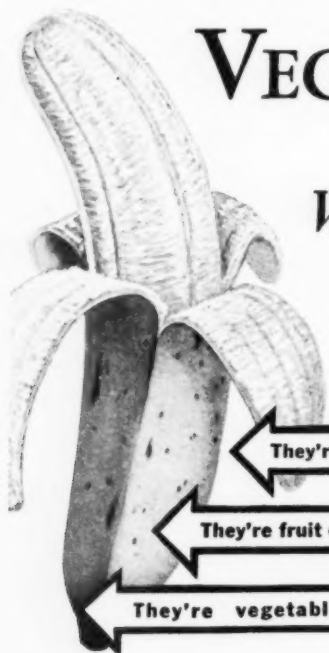
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Indian Head Fabrics

Nashua Blankets

Is it FRUIT or VEGETABLE?



Watch the color

WHEN yellow with green tips, cook bananas as a vegetable. They make a delicious meat accompaniment.

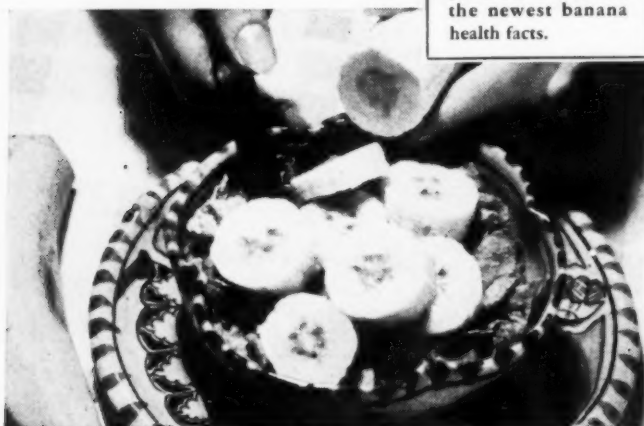
When yellow ripe, with no green on the tip, they're an excellent fruit for salads and desserts, and if still firm may also be used for cooking.

When yellow flecked with brown, they're at their best to peel and eat—or combine with milk for a well-balanced breakfast, lunch, supper or in-between meal. It is at this stage of ripeness that doctors recommend bananas for infant feeding.

Remember, bananas are not only one of the "protective" foods, but one of the easiest of all foods to digest.

NEW FACTS

Send coupon for interesting, readable booklet, written by a physician and giving the newest banana health facts.



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Please send free "The Banana Comes Into Its Own," written by a recognized food authority.

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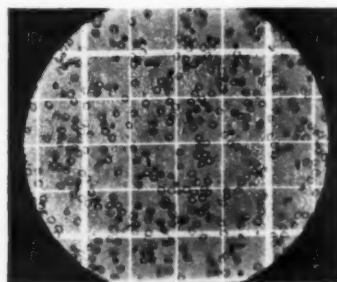
NEWS FROM MANUFACTURERS

A NEW HEMACYTOMETER

A new type of hemacytometer, based on an entirely new method of manufacture, is announced by the Spencer Lens Company, 19 Doat Street, Buffalo, N. Y.

Of the usual one-piece construction, this hemacytometer does not have its lines ruled in glass. Instead a metal surface is put on the glass surface by a sputter-arc and the lines are then ruled in this metal surface. The metal coating is fused into the glass in such a way that the molecules of metal and glass interlock. It cannot come off or wear off.

The most noticeable improvement is that the lines appear white on a dark background instead of gray on a light background. The manufacturer states that there are four important results from this change: (1) The visibility of



the lines is greatly increased; (2) It is not necessary to stop down the condenser, the lines can be seen at any opening of the condenser diaphragm; (3) There is a marked improvement in the visibility of particles in solution, such as corpuscles; (4) Eyestrain is decreased.

The manufacturer states that this new Spencer "Bright-Line" hemacytometer has had months of use by colleges and government research experts, and that it rigidly adheres to the requirements of the United States Bureau of Standards.

The slide is so constructed that the cover glass supports are raised above the body of the slide. The edges are beveled so that the cover glass can be tilted over a drop of blood placed upon the ruling, if desired. Each chamber is supplied with two cover glasses having optically worked surfaces to ensure perfect contact with the cover glass supports.

AN ATTRACTIVE ALL-PURPOSE LAMP

An efficient new lamp for a private hospital room has been designed by Cassidy Company, 101 Park Avenue, New York City.

Particular study has been given to the following requirements: (1) there must be no glare; (2) sufficient indirect light must be provided to illuminate the room comfortably; (3) plenty of direct light must be available for examinations; (4) a dim night light must be easily obtainable; (5) it must be possible to increase the intensity of the light without disturbing the patient; (6) the light must be bright enough to permit the nurse to observe respiration, arrange bed clothing and perform other duties and at the same time dim enough for the patient to remain undisturbed; (7) the lamp must serve as a night reading light for the nurse, and (8) original cost and maintenance cost must be low.

The Cassidy Bi-Flector Hospital Unit looks like an

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*You prescribe the
Uniform
let us worry about
Details*



JUST hand your prospective students the order blanks which we are glad to furnish and we will take the rest of the responsibility from your shoulders. You won't have to worry about telling your probationers how to make their outfits—it will not be necessary for you to collect any money or to keep any special accounts—and you can be sure that when your class enters it will be correctly and carefully outfitted.

This special order service is worth a great deal to you although it costs you nothing. Let us work with you to outfit your spring class by this simple method. We are anxious to submit samples and tell you more about the service we are prepared to give. Hundreds of Hospital Training Schools regularly use this Marvin-Neitzel service. Mail the coupon and give us the opportunity to help you.

Simple?

That's all you have to do

MARVIN-NEITZEL CORPORATION
Troy, New York

-Send sample order blank and explain system for ordering.
-Copy samples we are mailing and submit prices.
-Have a representative call on us without obligation to us.

Signed.....

Hospital.....

Address.....

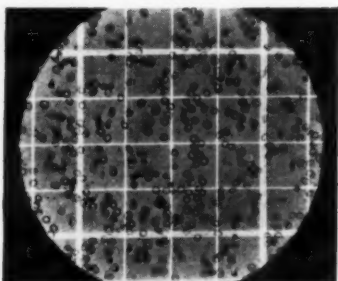
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MARVIN-NEITZEL CORPORATION

Troy, New York—192 Lexington Avenue, New York City

Originators of  Sanforized-Shrunk Uniforms

Presenting...the New Spencer
BRIGHT•LINE
Haemacytometer



New construction gives white lines on a dark background.

Out of a new method of manufacture comes a new Haemacytometer. Of the usual one-piece construction, the lines are **not** ruled in the glass. A metal surface is fused into the glass surface by a sputter arc and the lines are then ruled in this metal.

To the doctor, the greatest noticeable improvement is that the lines appear white against a dark background as contrasted to the old type in which the lines appear grey on a light background.

The Spencer "Bright-Line" Haemacytometer gives these improvements:

1. Visibility of lines greatly increased.
2. It is not necessary to stop down the condenser to focus—the lines can be seen the entire range.
3. A marked improvement is visibility of particles in solution because the condenser does not have to be stopped down.
4. Decreases eyestrain.

All resulting in the increased comfort of the person making the count.

Authorities in haematology characterize this "Bright-Line" Haemacytometer as a truly great advancement. Every doctor who has tested it has become actually enthusiastic. Our folder fully describes and pictures its construction and improvements. (Mail the coupon now!)

VISIT OUR BOOTH NO. 25 at the American Assn. for the Advancement of Science at Boston, Dec. 27th to Jan. 2nd.

Spencer Lens Company

SPENCER LENS COMPANY
 19 Doot Street, Buffalo, N. Y.

Gentlemen: Please send me your new folder M-59-H describing your new "Bright-Line" Haemacytometer.

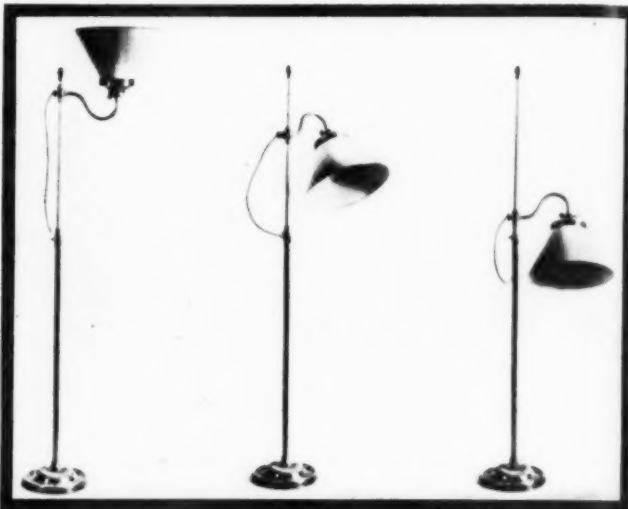
Doctor.....

Address.....

City..... State.....

attractive bridge lamp. Under the opaque shade are concealed one 7½-watt bulb and one 60-watt bulb. The 7½-watt bulb is automatically controlled by a mercury switch and lights only when it is in an upright position. Any bulb up to 150 watts may be used in this socket.

The method of handling is simple. When the arm is turned upward the 7½-watt bulb lights automatically. The room is then illuminated with a soft diffused light of a low intensity that will not disturb the patient's sleep but will enable the doctor or nurse to observe the patient's condi-



tion. Should emergency require, a turn of the switch floods the room immediately with a glareless light. When direct light is required, a simple twist of the wrist focuses a direct light on the patient. The eyes of doctor or nurse are in complete shadow due to the opaque shade. This position also provides a perfect reading light for the patient. To provide a night light by which the nurse may read, the arm of the lamp is slid down to its lowest position. The light then is below the level of the bed and does not disturb the patient.

Economy results from using only 67½ watts to light the room for all purposes as against a possible 200. The use of this lamp makes possible the replacement of other units.

RUBBER GLOVES WITH NONSLIP FINISH

Rubber gloves with a frosted finish are being made by the Miller Rubber Products Company, Inc., Akron, Ohio. The frosting process is applied to surgeons' gloves so that a firmer hold may be obtained when handling wet slippery instruments, sutures and tissues. No foreign or gritty ingredients are employed to produce the nonslip finish. These gloves may be turned inside out and used as smooth gloves.

MANY NEW ITEMS IN DENNISON LINE

An interesting line of hospital goods has been developed by the Dennison Manufacturing Company, Framingham, Mass., with the purpose of securing efficiency and at the same time promoting greater economy. Bedpan covers are being offered, for example, to replace the cotton sheet used for this purpose. They are made in two sizes, 18 by 40 inches and 18 by 23 inches, from heavy embossed crepe paper stock and are packaged 250 in a substantial box.

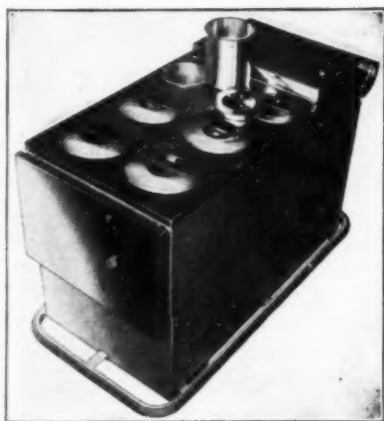
What appear to be extremely practical, too, are drip

QUALITY
at a price that
means true Economy
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HOSPITAL DIVISION
New York, 6 W. 48th St.
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Serve Better Food Save Service Costs



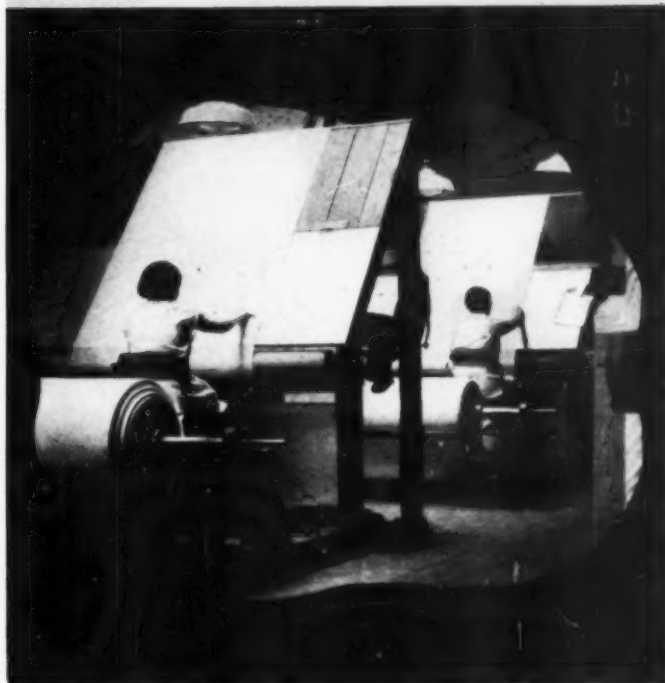
The patient today is more critical of service. The hospital is faced with a greater need of economy than ever before. In food service there is one satisfactory solution to these two demands—Ideal Food Conveyor Systems. Replace your antiquated equipment now. Inquire about our deferred payment plan.

Made and sold only by the largest manufacturer of hospital food service equipment in the World.

THE SWARTZBAUGH MFG. CO.
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Ideal
SWARTZBAUGH
EQUIPMENT

THE VIGILANT EYES and skilled hands of trained operators pick the woven cotton base used in making du Pont Sheeting silk-smooth. Assurance that du Pont Rubber Sheeting will give you full value in actual service.



PICKING COTTON TILL IT'S SMOOTH AS SILK

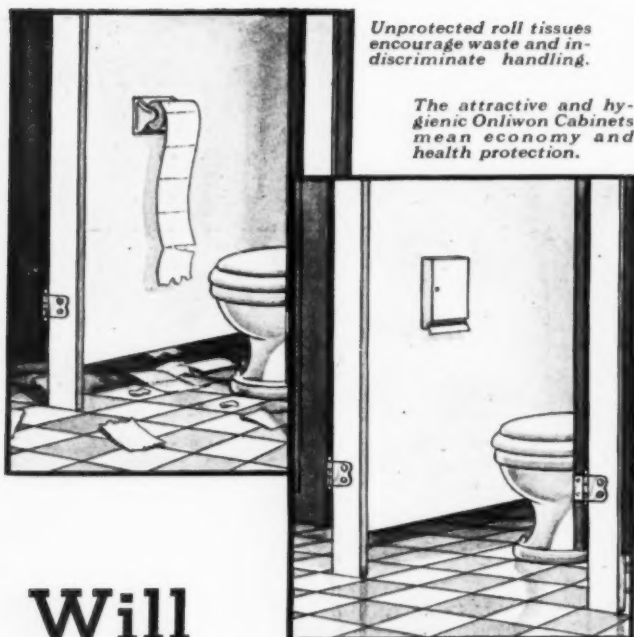
SUCH fussiness about the woven cotton base in du Pont Hospital Sheeting may not seem at all necessary. But we believe it is. For if we did not set up and adhere to such rigid specifications, we would not be in a position to give you the full value you now get in du Pont Sheeting.

The fabric used as the base for du Pont Hospital Sheeting must be clean and free from misweaves, moths and other defects that may be found in ordinary sheeting. This unceasing control of raw materials is supplemented by the pre-testing of each run of finished sheeting. Tests are made of its resistance to sterilization, uric acid, blood and steam. Of its tensile strength. Also the oxygen "bomb" test, which puts samples of sheeting through a year's wear in 48 hours.

For these reasons, when you are considering rubber sheeting, for economy's sake write us first for prices and particulars. Ask about our free rack offer when you do.

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REG. U.S. PAT. OFF.

FAIRFIELD RUBBER SHEETING
E. I. DU PONT DE NEMOURS & CO., RUBBER PRODUCTS DIVISION
FAIRFIELD, CONN.



Will your washrooms STAND INSPECTION?

Do you see littered toilet paper when you inspect your washrooms?

There's a satisfaction in having A.P.W. Onliwon Tissue in your washrooms—no one, from the chairman of the board to the student nurses, can complain. Attractive Onliwon Cabinets protect the paper from dust, dirt and theft and serve two sheets at a time—keep waste to a minimum and your washrooms spick and span.

Prices are right, too. Even the leanest hospital budget can provide for A.P.W. Onliwon Toilet Tissue, as well as A.P.W. Onliwon Towels.

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Without obligation, write A. P. W. Paper Co., Albany, N. Y., for samples and/or name of local distributor as near you as your telephone.

sheets and sputum papers. The drip sheet is a large sheet, 18¾ by 29½ inches made of material which may be sterilized. It is not bulky, yet will be found soft, lintless and strong when either wet or dry. It is well adapted to such uses as a sanitary bath sheet for the nursery, a fresh one being placed under the infant on the table when it is taken from the bath to be dried. It is also helpful on examination tables as well as for use after the patient has had an anesthetic.

The company is also bringing out surgeons' caps and aprons. The white crêpe paper hat stretches and fits snugly and covers the head completely, and the aprons provide a clean, pliable, strong covering. Shrouds or morgue sheets may be had in heavy paper material crêped, stocked in size 61 by 84 inches and packaged 125 to a box, and communicable disease gowns and examination capes are likewise included among the new offerings.

NEW TRADE CATALOGUES AND PAMPHLETS

Warren E. Collins, Inc.—An apparatus which it is claimed actually breathes for an infant apparently incapable of respiration, is the infant model of the Drinker respirator, described in a thirty-two-page booklet from Warren E. Collins, Inc., 555 Huntington Avenue, Boston. This is a miniature of the adult respirator. It provides controlled artificial respiration for newborn infants. Records of many babies treated by the Drinker method appear in case reports, tables and diagrams submitted by various physicians.

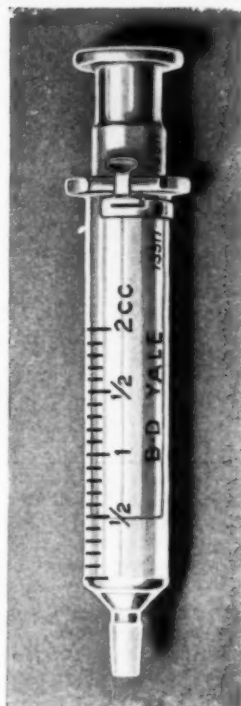
Lily Tulip Cup Corp.—A food service bulletin designated as No. LT 23 is being distributed by the Lily Tulip Cup Corp., 122 East Forty-Second Street, New York City, for the benefit of persons in charge of the preparation and serving of food. Various types of cups and containers are described, designed not only to eliminate complaints through making the food more appetizing but to provide adequate containers for holding leftover foods. A particularly interesting feature is the introduction of color into these containers, thus making it possible to secure attractive molds in an assortment of shades.

The Permutit Co.—A booklet entitled "How Soft Water Saves Money in a Hospital" has been prepared for distribution by the Permutit Co., 330 West Forty-Second Street, New York City. The damage caused by hard water to water pipes, heating systems, sterilizers, laundry machinery and other hospital equipment is explained. There follows a description of the zeolite process of softening water, how it can be installed in the hospital and some of the results of water softener installations in six hospitals. An audit check list is included for estimating the possible savings that could be made by installing a water softener.

The Gorham Company—An attractive catalogue by The Gorham Company, 6 West Forty-Eighth Street, New York City, depicts silverware for hospitals, hollowware as well as flatware. A page is devoted to the new "Bayonet" shape blade knife, and the making of a spoon and other processes of manufacture are also pictorially described.

Westinghouse Electric & Mfg. Co.—A revised twelve-page circular describing and illustrating gas electric sets for many applications has been issued by the Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. The publication describes the outstanding features and applications of sets ranging from 800 watts to 100 kv-a. The sets are used wherever auxiliary power is needed. The circular is entitled "Gas Electric Sets for Every Application."

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Copy must be received at The MODERN HOSPITAL, 919 North Michigan, Chicago, not later than the 15th of the month preceding issue to insure insertion.

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COLLECTOR—Money—Money—Money—How to collect it. This is a simple problem if it is handled correctly. Mr. X can prove that he has collected an unbelievable amount. He will work on salary or commission. Address M. L. 142, The MODERN HOSPITAL.

EXECUTIVE—Graduate nurse with several years' experience desires superintendency of small or medium sized hospital. Address M. L. 148, The MODERN HOSPITAL.

EXECUTIVE—With wide experience in hospital field desires change of location. References from present Directors. Past connections with hospitals of from 100 to 300 beds. Salary open. Address M. L. 96, The MODERN HOSPITAL.

HOUSEKEEPER—Graduate Nurse, desires position as housekeeper in Nurses Home or other institution. Address M. K. 124, The MODERN HOSPITAL.

LABORATORY TECHNICIAN—Position in hospital or clinic; Experienced; Bachelor of Science Degree; West or Middle West preferred. Address M. L. 132, The MODERN HOSPITAL.

LABORATORY TECHNICIAN—Having had eleven years' experience. Urinalysis, blood counts, cultures, typings, bacteriology, Wassermanns, some x-ray work. Excellent references. Address M. L. 136, The MODERN HOSPITAL.

LAUNDRY SUPERINTENDENT—Fifteen years' experience. Long Island Hospital, Brooklyn; Fifth Avenue Hospital, New York City—also hotel laundries—go anywhere. Address M. L. 146, The MODERN HOSPITAL.

MANAGER or SUPERINTENDENT—Registered nurse—experienced in hospital management and training school routine—willing to combine duties. Excellent credentials. Address M. K. 118, The MODERN HOSPITAL.

OPERATING ROOM SUPERVISOR—Ten years' experience in 300-bed hospital. Registered in Pennsylvania, Kentucky, and Ohio. Can teach technique. Excellent credentials. Address M. L. 152, The MODERN HOSPITAL.

SUPERINTENDENT-BUSINESS MANAGER—Layman, experienced, highly recommended, organizer and systematizer of all hospital departments. At present with large New York hospital. Available January first. Willing to accept assistant superintendency large general hospital. Preferably East. Salary open. Address M. L. 150, The MODERN HOSPITAL.

SUPERINTENDENT and DIRECTOR OF NURSES—Positions desired by two registered nurses; first qualified as anesthetist and buyer; second in physiotherapy and dietetics. Both holding positions as superintendent of nurses in 125-bed hospitals. Change in location desired. Salary open. Address M. L. 134, The MODERN HOSPITAL.

SUPERINTENDENT—Layman, eight years' experience as Assistant Superintendent and purchasing agent, at present connected with one of the leading private hospitals in New York City. Familiar with every phase of hospital work. Wishes position in General Hospital, anywhere in east. Would consider assistant superintendency. Best of references. Salary open. Address M. J. 102, The MODERN HOSPITAL.

SUPERINTENDENT—Layman, single, thoroughly trained in every branch of hospital administration. Seven years with two large hospitals New York City. Salary \$3,000. Available within thirty days. Address M. A. 6, The MODERN HOSPITAL.

POSITIONS WANTED—Continued

SUPERINTENDENT—Layman, married; experienced in business purchasing, management, etc.; successful, economical; 3½ years in present position, during which time hospital has been changed from large deficit to practically self-sustaining. Best of references. Address M. L. 144, The MODERN HOSPITAL.

SUPERINTENDENT—Fifteen years' experience—a man with experience in rebuilding hospital organizations—recognized as capable business man by trustees—holds M.D. and Ph.D. degrees. Fifty-five years of age. Unusually fine credentials. Address M. L. 140, The MODERN HOSPITAL.

SUPERINTENDENT—Now assistant superintendent directing business management of large sanatorium; seeking position as hospital superintendent. B.Sc. degree 1914. Fifteen years in business. Age 42; married; unusually fine references. Address M. L. 154, The MODERN HOSPITAL.

SUPERINTENDENT or ASS'T SUPERINTENDENT—48, layman, single. 23 years in three Pennsylvania hospitals. Experience in all branches. Best references. Available immediately. Address M. L. 156, The MODERN HOSPITAL.

SUPERINTENDENT OF NURSES—Fifteen years as superintendent and instructor in large hospitals. Will also consider superintendency of hospital 75 to 100 beds. Address M. L. 138, The MODERN HOSPITAL.

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Chicago, Illinois

ADMINISTRATOR—Johns Hopkins graduate; nine years' experience as director of large hospitals including university hospital; regarded as one of best informed administrators in the hospital field; excellent experience also in hospital consultation and survey work. 175.

ADMINISTRATOR—Graduate middlewestern hospital; eleven years, administrator, 200-bed hospital; recommended as exceptional woman of unusual ability; well educated; hospital stands as well equipped and beautiful institution with practically no endowment as a tribute to her ability as administrator. 175.

ANESTHETIST—Graduate of one of Pennsylvania's leading training schools; two years at Columbia; postgraduate training in anesthesia; five years' experience as anesthetist during which time she combined her duties with those of operating room supervisor or superintendent; five years, supervisor on staff of Philadelphia General before taking up anesthesia. 176.

(Continued on page 132)

The New COLSON SAFETY INHALATOR



AS an aid in treating respiratory ailments, this new Colson Safety Inhalator is an indispensable piece of equipment.

Electrically operated, it will produce vapor in less than four minutes. Maximum benefit is assured because the design of the Inhalator is scientifically correct, producing vapor that can be comfortably inhaled and properly charging it with volatilized medicine.

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• WANT ADVERTISEMENTS, Continued •

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DIETITIAN—B.S. degree, state university; course in hospital dietetics, Presbyterian Hospital, Chicago; two years, assistant dietitian, large eastern hospital where she has had complete charge of special diet kitchen, nutrition clinic and taught diet therapy to student nurses. 178.

DIRECTOR OF NURSES—B.A., M.A. degrees; postgraduate training in hospital administration and teaching; three years, teacher in public schools before entering nurses' training; four years' experience as instructor; two years, assistant director of nurses, university hospital; five years, director of nurses, hospital averaging more than 300 patients. 179.

DIRECTOR OF NURSES—A.B., B.S., M.A. degrees; graduate of university school of nursing; several years' experience as instructor; five years, director of nurses, pediatric institution. 180.

EDUCATIONAL DIRECTOR—B.S. with diploma in administration in schools of nursing, Columbia; M.A. in health education; postgraduate training in pediatrics; eight years' experience as educational director; available February 1st. 181.

INSTRUCTOR—Graduate of an eastern hospital; B.S. degree, Columbia; four years, practical instructor, 300-bed hospital; recommended as young woman of attractive personality with marked intellectual ability; excellent teacher; able to carry heavy schedule without any apparent effort. 182.

SUPERVISOR—Graduate of Yale School of Nursing; B.A. degree; institutional experience consists of one year as head nurse on surgical and orthopedic floor. 183.

SUPERVISOR—Graduate of the University of Michigan Hospital; three years' supervising experience during which time she taught all nursing. 184.

SUPERVISOR—Of out-patient departments of clinics; graduate Presbyterian Hospital, Chicago; one year, surgical nurse university hospital; four years' clinical experience specializing year each in surgery, medical, eye, ear, nose and throat. 185.

SUPERVISOR—Graduate of university hospital school of nursing; nine months' postgraduate work in psychiatry at Bloomingdale Hospital, White Plains, New York; two years' college training; two years' supervising experience. 186.

SUPERVISOR—Graduate of university hospital; postgraduate training in operating room technique, Bellevue; course in hospital administration, Columbia; five years, operating room supervisor and instructor in surgery, 400-bed hospital. 187.

SUPERVISOR—Graduate of university hospital training school; postgraduate training in Lying-In Hospital; five years, supervisor of obstetrics on staff of large teaching hospital. 188.

SUPERVISOR—Postgraduate training in pediatrics at Western Reserve; three years' experience as pediatric supervisor. 189.

TECHNICIAN—Eighteen months' training in x-ray and laboratory work; four years, x-ray and laboratory technician, 50-bed hospital. 190.

NURSE-TECHNICIAN—Graduate nurse; year's training in both x-ray and laboratory work; two years, x-ray and laboratory technician and surgical nurse, small hospital in midwest. 191.

PHYSIOTHERAPIST—Graduate nurse; training in physiotherapy, Northwestern University Medical School; five years' experience as physiotherapist. 192.

POSITIONS WANTED—Continued

MEDICAL BUREAU
M. BURNEICE LARSON, Director
3800 Pittsfield Building
Chicago, Illinois

PATHOLOGIST—Physician; graduate work, Johns Hopkins; eight years in charge of laboratory department, well known hospital. 193.

SOCIAL WORKER—A.B., state university; B.S., Simmons School of Social Work; five years' experience in hospital social service work. 194.

TECHNICIAN—B.S., Ph.D. degrees, two years, research assistant, well known institution; three years, laboratory technician, 400-bed hospital; capable in any type of laboratory work or investigation; special training in general bacteriology, bacteriology of upper respiratory infections, tissue cultures, hematology. 195.

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SUPERINTENDENT—Diploma in Nursing, Middlewestern School of Nursing; 7 years' experience as Director of School of Nursing; 7 years' experience as Superintendent.

INSTRUCTOR—Diploma in Nursing, Bellevue School of Nursing; A.B. degree; 6 years' experience as high school teacher; Assistant Instructor, Bellevue School of Nursing 2 years; Assistant Superintendent of Nurses 9 months.

OPERATING ROOM SUPERVISOR—Diploma in Nursing, Middlewestern School of Nursing; B.S. degree; 4 years' experience as Operating Room Supervisor in University School of Nursing.

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Your interests are protected in always consulting the advertising pages of The MODERN HOSPITAL and The YEAR BOOK whenever you are in need of supplies and equipment. For here you will find the announcements of recognized manufacturers whose integrity, reliability and financial stability are assured.

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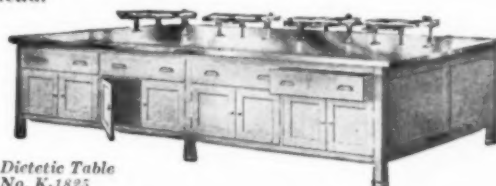


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• WANT ADVERTISEMENTS, Continued •

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ANESTHETISTS—(a) Anesthetist qualified to supervise maternity department; postgraduate work in anesthesia and obstetrics required; west. (b) Anesthetist qualified to act as assistant obstetrical supervisor; large Catholic hospital; gas and ether anesthetics. (c) Anesthetist qualified in laboratory and x-ray work; small hospital; good salary. 150.

INSTRUCTORS—(a) Educational director; college trained woman for eastern school; opportunity to develop program; \$2,400. (b) Practical instructor; university school; B. S. degree required; duties teaching exclusively. (c) Instructor; large Catholic hospital; B. S. degree, teaching experience required. (d) Theoretical instructor; some college work and teaching experience, New York registration required; \$120 maintenance. (e) Instructor; 350-bed New England hospital; capable of teaching sciences; Catholic; two years college required. (f) Science instructor; university hospital; splendid connection; \$135 maintenance. 151.

EXECUTIVES—(a) Director of Nurses; one of the finest hospitals in west; large well organized school; splendid opportunity. (b) Director of Nurses; 150-bed hospital; southwest; some college training preferred. (c) Superintendent; 100-bed midwestern hospital; duties purely administrative. (d) Superintendent; small midwestern hospital; splendid equipment; good salary. (e) Assistant superintendent of nurses for large tuberculosis unit of outstanding hospital; unusual opportunity for advancement; experience in tuberculosis nursing essential. 152.

SUPERVISORS—(a) Obstetrical supervisor qualified to teach her subject; New York registration required. (b) Obstetrical supervisor qualified gas and ether anesthetics; large Catholic hospital. (c) Surgical supervisor 125-bed hospital; Chicago vicinity; (d) Operating room supervisor for southern university hospital; unusual salary. (e) Night supervisor; older woman with several years' experience required; \$115 maintenance. (f) Pediatric supervisor; 250-bed eastern hospital; several years of experience required. 153.

NURSE TECHNICIANS—(a) Graduate nurse qualified in x-ray and laboratory technique to work under the direction of pathologist-roentgenologist. (b) Nurse qualified in anesthesia, x-ray and laboratory work; small hospital; good opportunity. 154.

THE NEW YORK MEDICAL EXCHANGE
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INSTRUCTOR—January 1, eastern hospital, salary open.

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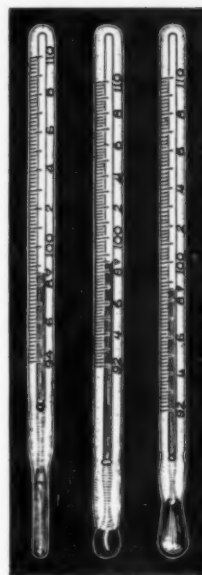
Equipment in 19-room hospital, \$5,000.00, or will lease with equipment. Biscayne Boulevard Co., 1317 Biscayne Boulevard, Miami, Florida.

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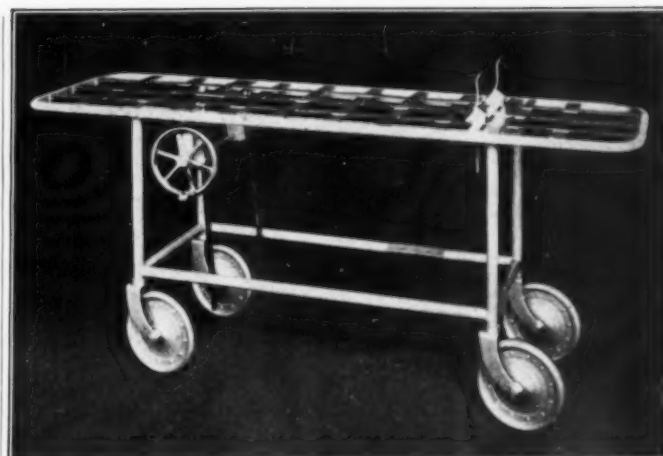
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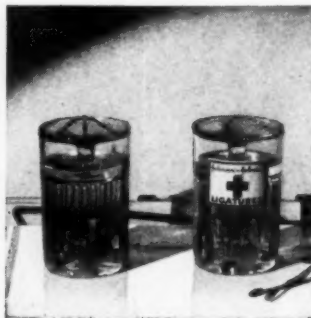
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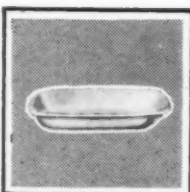
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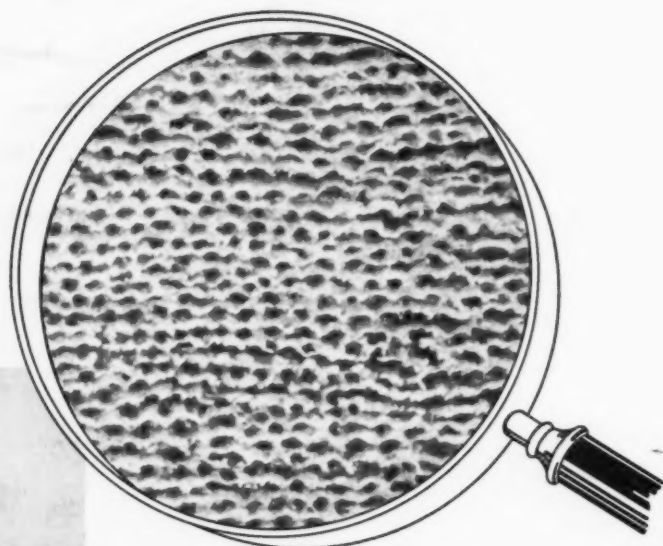
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